

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 1

WASHINGTON, D. C., DECEMBER 14, 1926

WINTER 1926-27

## REVIEW OF THE SNOWFALL CONDITIONS FOR THE SEASON TO DATE

*September.*—As is usually expected in this month, snows occurred in the northern Rocky Mountains, some heavy falls being reported on the 23d and 24th from high elevations in Montana, Idaho, and Wyoming, with smaller amounts in the mountains to southward and in the near-by foothills.

*October.*—No important or unusual snows were reported, which was in sharp contrast with conditions in October, 1925, when unusually heavy and early snows fell over wide areas.

*November.*—More or less snow occurred at intervals over the central and northern districts, as well as in the mountains of the West, but the falls were mainly light. During the cold weather of the early part of the last decade a light snow cover over the Central-Northern States afforded some protection to winter grains. No important drifting occurred, and there was little interruption to traffic.

During the present month the first important snow of the season occurred over the Lake region, Ohio Valley, and thence eastward during the 5th and 6th, the falls becoming heavy toward the east, particularly in New York and New England where the depths ranged up to a foot or more, in some cases the heaviest falls of record so early in the month.

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

During the week just closed, light snow has fallen on several dates in the western mountains and locally over small areas in the central and northern States to eastward.

At the close of the week, 8 p. m. Monday, there was a snow cover over nearly two-thirds of the country, though over much of this area the amounts were not more than traces. Over most of New York and generally over New England the depths range from 6 to 12 inches, while in the upper Lake region and thence westward to North Dakota the depths are somewhat greater, ranging up to 2 feet, or even more locally in the northern portions of Michigan and Minnesota.

In the mountains of northern New Mexico and Colorado, considerable depths have already accumulated, and similar conditions exist in the high mountains of southern Idaho and northeastern Oregon.

No important depths have yet accumulated in the Cascades or the Sierra Nevada.

## ICE IN RIVERS AND HARBORS

The severe cold during the early part of the month over northern districts caused an unusual accumulation of ice in those districts, particularly in the upper Missouri River and its tributaries, as well as on other streams to the eastward and in the protected harbors of Lake Superior.

In the canals and locks at the "Soo", one of the earliest and greatest blockades ever experienced in the marine history of the Great Lakes existed during portions of the first week, more than 100 vessels of various kinds being unable to make their way through the heavy ice. These were released later. In the Erie Canal and other waterways of northern New York, many barges are icebound and navigation is closed.

In the upper Missouri River the ice ranges up to a foot or more, and 7 inches is reported on the Mississippi River at La Crosse. In Lake Superior the ice thickness ranges up to nearly 10 inches in the protected harbors, and at Oswego, on Lake Ontario, a thickness of 2 inches is reported.

Considerable ice has formed on the rivers and lakes of New England, more than 10 inches being reported on Moosehead Lake at Greenville, Me.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., DECEMBER 13, 1926

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Arizona</i>	<i>Inches</i>	<i>Inches</i>	<i>New Hampshire</i>	<i>Inches</i>	<i>Inches</i>
Bright Angel .....	18	.....	Concord .....	6	3.0
Holbrook .....	2	.....	Hanover .....	6	.....
<i>Colorado</i>			Pittsburg .....	8	.....
Cumbres .....	30	.....	<i>New Jersey</i>		
Denver .....	2	.....	Lakewood .....	2	.....
Durango .....	4	.....	Phillipsburg .....	3	.....
Leadville .....	7	.....	<i>New Mexico</i>		
Pueblo .....	2	0.0	Chama .....	7	.....
<i>Connecticut</i>			Corona .....	4	.....
Hartford .....	6	*	Gamercio .....	8	.....
New Haven .....	4	0.0	<i>New York</i>		
<i>Idaho</i>			Albany .....	6	*
Boise .....	1	.....	Alfred .....	5	.....
Ketchum .....	10	.....	Beaver River .....	10	.....
Lewiston .....	1	0.0	Buffalo .....	4	0.0
McCall .....	11	.....	Canton .....	7	.....
Pocatello .....	7	.....	Cutchogue .....	4	.....
Soldier Creek .....	10	.....	Ithaca .....	3	.....
Spencer .....	2	.....	New York .....	2	0.0
Vienna Mine .....	66	.....	Oswego .....	3	2.0
<i>Iowa</i>			Syracuse .....	3	.....
Charles City .....	4	.....	Watertown .....	9	.....
Des Moines .....	T.	2.0	<i>North Dakota</i>		
Dubuque .....	2	0.0	Bismarck .....	2	13.0
<i>Maine</i>			Devils Lake .....	6	.....
Eastport .....	8	0.0	Ellendale .....	3	.....
Gardiner .....	10	5.0	Williston .....	1	13.0
Greenville .....	9	10.5	<i>Oregon</i>		
Portland .....	6	0.0	Harrison Mine .....	28	.....
<i>Massachusetts</i>			Lakeview .....	4	.....
Amherst .....	8	.....	Portland .....	2	0.0
Boston .....	6	0.0	Siskiyou .....	8	.....
Williamstown .....	7	.....	Sled Springs .....	8	.....
<i>Michigan</i>			<i>Pennsylvania</i>		
Alpena .....	1	†	Mifflintown .....	3	.....
Ann Arbor .....	2	.....	Scranton .....	3	.....
Cadillac .....	7	.....	Warren .....	4	.....
Escanaba .....	10	3.5	Williamsport .....	4	.....
Houghton .....	15	4.0	<i>South Dakota</i>		
Humboldt .....	34	.....	Huron .....	1	11.0
Iron Mountain .....	8	.....	Pierre .....	1	11.0
Ludington .....	5	.....	Yankton .....	2	1.5
Mackinaw .....	5	.....	<i>Texas</i>		
Marquette .....	15	0.0	Amarillo .....	1	.....
Saginaw .....	2	.....	<i>Utah</i>		
Sault Ste. Marie .....	10	†	Duchesne .....	3	.....
<i>Minnesota</i>			Logan .....	6	.....
Duluth .....	12	9.0	Salt Lake City .....	4	.....
Ely .....	25	.....	<i>Vermont</i>		
Leech Lake Dam .....	24	.....	Brattleboro .....	5	1.5
Mankato .....	6	.....	Burlington .....	3	0.0
Moorhead .....	12	9.0	Northfield .....	6	.....
St. Paul .....	8	†	Rutland .....	6	.....
Thief River Falls .....	20	.....	<i>Washington</i>		
Worthington .....	6	.....	Cascade Tunnel .....	2	.....
<i>Montana</i>			Paradise Inn .....	31	.....
Belton .....	5	.....	Walla Walla .....	3	.....
Havre .....	1	.....	<i>Wisconsin</i>		
Miles City .....	3	.....	Fond du Lac .....	7	.....
<i>Nebraska</i>			Green Bay .....	8	4.0
Columbus .....	6	.....	La Crosse .....	6	7.0
Imperial .....	3	.....	Madison .....	4	.....
North Platte .....	1	.....	Park Falls .....	15	.....
Omaha .....	T.	‡	Wausau .....	11	2.0
O'Neill .....	2	.....	<i>Wyoming</i>		
Valentine .....	3	.....	Alta .....	4	.....
<i>Nevada</i>			Cheyenne .....	3	.....
Arthur .....	5	.....	Dome Lake .....	21	.....
Elko .....	5	.....	Lander .....	6	.....
North Fork .....	3	.....	Yellowstone Park .....	2	.....

P. C. DAY.

*Meteorologist, in charge of Division.*

\*Shore ice. †Floating ice. ‡Ice gorged. § Measurement impracticable.  
T. indicates trace.



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 2

WASHINGTON, D. C., DECEMBER 21, 1926

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

At the beginning anticyclonic conditions existed over much of the country, attended by severe cold over the Missouri and upper Mississippi Valleys, the line of zero temperature reaching from southwestern Kansas to the southern end of Lake Michigan, the cold increasing to the northward where from Minnesota westward to Montana and over the Canadian Northwest it ranged from 20° to 30° below zero. To the southward freezing weather had extended nearly to the coast of Texas, and changes in temperature for the preceding 24 hours ranged from 20° to 50° over a large area from Texas to the Ohio Valley and Great Lakes.

With slight interruptions cold weather prevailed during the greater part of the week over nearly all portions of the country, but toward the end there was considerable warming up and at the close moderate weather prevailed over the greater part of the country.

The average temperature for the week was decidedly below normal in nearly all central and northern districts, and freezing weather extended to the Gulf and South Atlantic coasts, but did not reach Florida.

Precipitation was mainly light, except over a narrow belt from central Texas to the lower Ohio Valley and in the far Northwest. Little snow occurred, except locally in the lower Lake region and in the mountain districts of the far Northwest. At Buffalo and near-by localities unusually heavy snow occurred on the 16th, impeding traffic to some extent.

## DEPTH OF SNOW ON GROUND

No important changes occurred in the depth of the snow cover as compared with last week, nor in the area having such a cover.

The slight covering at the beginning of the week afforded some protection to winter grains over the central and northern districts between the Mississippi River and Rocky Mountains during the severe cold over that region about the first of the week, but this cover was largely removed by the warmth of the closing days. Over the far Northwest and in the mountain States there was mainly sufficient snow to protect grains during the severe cold.

In the northeastern districts there was little change during the week, but in the upper Lake region there was a general increase of 5 to 10 inches, or more. In the far Northwest there were locally large increases in the higher elevations, some stations reporting as much as 2 feet, or more, during the week.

In the mountains of California and generally in the central and southern mountain States there was a slight reduction in the depths as compared with the preceding week.

## ICE IN RIVERS AND HARBORS

Due to severe cold over northern and most central districts during much of the week, there were important increases in the amount of ice on the rivers and lakes where it had previously formed, and the area over which ice formed to an appreciable degree extended considerably farther south.

In the upper Missouri the increases ranged generally from 4 to 8 inches, and they were slightly less on the upper Mississippi. In the Great Lakes the increases in the harbors of Lake Superior ranged up to 8 inches, while on the remaining lakes, which were mainly free of ice last week, the new ice formed during the week ranged usually from 2 to 5 inches.

On the rivers of the Atlantic coast, ice of considerable thickness formed as far south as the Potomac, and increased to 8 inches on the Hudson at Albany, but there were generally smaller increases on the rivers and lakes of New England.

Ice harvest has begun in some of the districts between the Great Lakes and Rocky Mountains, and in New England the ice is nearly thick enough for harvest on many lakes and ponds.

P. C. DAY,

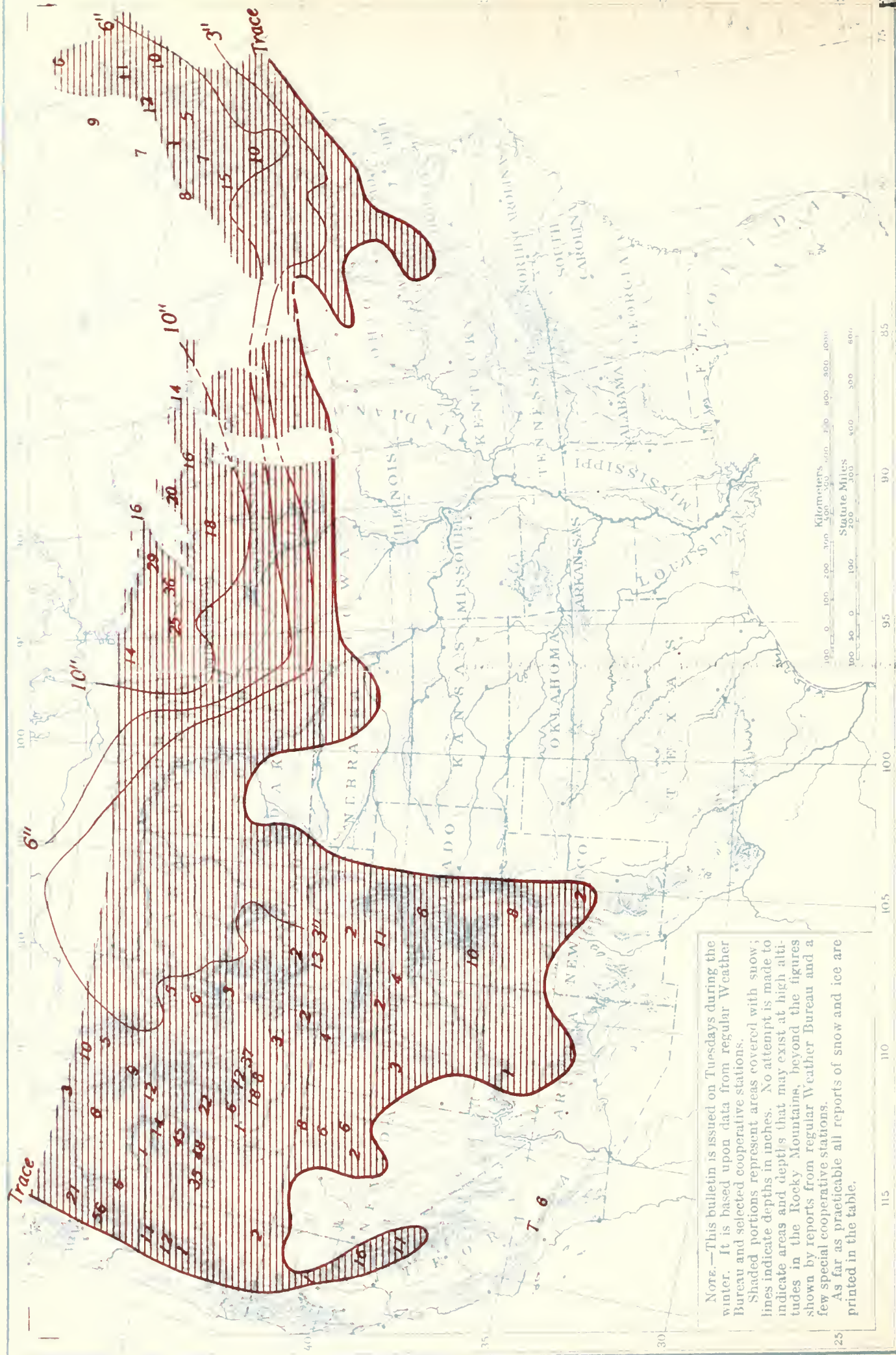
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., DECEMBER 20, 1926

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>California</i>	<i>Inches</i>	<i>Inches</i>	<i>New Hampshire</i>	<i>Inches</i>	<i>Inches</i>
Norden.....	16	.....	Berlin.....	6	.....
Relief.....	11	.....	Concord.....	5	5.0
Squirrel Inn.....	6	.....	Durham.....	4	.....
<i>Colorado</i>			Keene.....	6	.....
Durango.....	1	.....	<i>New Mexico</i>		
Leadville.....	6	.....	Corona.....	2	.....
Rico.....	10	.....	Tres Piedras.....	8	.....
Steamboat Springs.....	11	.....	<i>New York</i>		
<i>Connecticut</i>			Albany.....	4	8.0
Hartford.....	5	4.5	Alfred.....	5	.....
New Haven.....	2	0.0	Binghamton.....	4	.....
<i>Idaho</i>			Buffalo.....	6	3.0
Boise.....	1	.....	Canton.....	6	.....
Hailey.....	8	.....	Herkimer.....	7	.....
Idaho City.....	6	.....	Lowville.....	12	.....
McCall.....	22	.....	Malone.....	7	.....
Pocatello.....	3	.....	Ogdensburg.....	8	.....
Porthill.....	3	.....	Poughkeepsie.....	6	.....
Vienna Mine.....	72	.....	Rochester.....	2	8
<i>Iowa</i>			Saranac Lake.....	12	.....
Davenport.....	0	†	Saratoga Springs.....	6	.....
Dubuque.....	1	6.0	Syracuse.....	5	.....
Forest City.....	2	.....	Warwick.....	6	.....
Iowa Falls.....	2	.....	<i>North Dakota</i>		
Keokuk.....	0	6.5	Bismarck.....	2	17.0
Sioux City.....	2	8.0	Williston.....	1	17.5
<i>Maine</i>			<i>Ohio</i>		
Farmington.....	9	.....	Ashland.....	T.	.....
Gardiner.....	10	7.0	Sandusky.....	0	5.0
Greenville.....	11	11.0	Toledo.....	0	5.0
Houlton.....	6	.....	<i>Oregon</i>		
Millinocket.....	9	.....	Government Camp.....	11	.....
Portland.....	7	0.0	Harrison Mine.....	35	.....
Van Buren.....	6	.....	Sled Springs.....	14	.....
<i>Michigan</i>			Wallowa.....	10	.....
Alpena.....	6	2.0	<i>Pennsylvania</i>		
Battle Creek.....	1	.....	Emporium.....	4	.....
Bloomington.....	2	.....	Harrisburg.....	T.	4.0
Detroit.....	T.	8.0	Parkers Landing.....	2	.....
Escanaba.....	12	12.0	Scranton.....	3	.....
Grand Rapids.....	1	.....	Towanda.....	4	.....
Houghton.....	20	12.0	<i>South Dakota</i>		
Lansing.....	2	.....	Huron.....	T.	14.0
Sault Ste. Marie.....	14	5.0	Yankton.....	1	6.0
<i>Minnesota</i>			<i>Utah</i>		
Campbell.....	15	.....	Duchesne.....	2	.....
Collegeville.....	8	.....	Logan.....	4	.....
Duluth.....	14	14.0	Salt Lake City.....	1	.....
Ely.....	29	.....	Watson.....	4	.....
Mankato.....	9	.....	<i>Vermont</i>		
Minneapolis.....	7	.....	Brattleboro.....	4	6.0
Roseau.....	14	.....	Northfield.....	5	.....
<i>Montana</i>			<i>Washington</i>		
Belton.....	10	.....	Cascade Tunnel.....	21	.....
Bozeman.....	6	.....	Spokane.....	6	.....
Haugan.....	9	.....	Walla Walla.....	1	.....
Kalispell.....	5	.....	Yakima.....	6	.....
Miles City.....	2	.....	<i>Wisconsin</i>		
Red Lodge.....	3	.....	Brodhead.....	2	.....
<i>Nebraska</i>			Green Bay.....	7	12.0
Columbus.....	2	.....	La Crosse.....	5	9.0
Omaha.....	0	3.0	Madison.....	3	.....
O'Neill.....	2	.....	Milwaukee.....	1	.....
Tekamah.....	1	.....	Park Falls.....	18	.....
<i>Nevada</i>			Wausau.....	13	11.0
Arthur.....	6	.....	<i>Wyoming</i>		
Austin.....	1	.....	Dome Lake.....	17	.....
Gold Creek.....	8	.....	Lander.....	2	.....
Hylton.....	2	.....	South Pass City.....	13	.....
North Fork.....	6	.....	Yellowstone Park.....	3	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable. T. indicates trace.

Depth of Snow on Ground, 8 p. m., December 20, 1926.



Note.—This bulletin is issued on Tuesdays during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations.

Shaded portions represent areas covered with snow; lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations.

As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 3

WASHINGTON, D. C., DECEMBER 28, 1926

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

Marked and rapid changes in temperature occurred over the northern and central districts, with frequent and heavy precipitation over the Ohio and lower Mississippi Valleys and west Gulf States.

Temperatures were mainly higher than normal in the Dakotas and near-by areas and to eastward of the Mississippi River, save in New England and portions of New York. The week was unusually warm over the Southeastern States, the positive departures ranging from 6° to 12°. On the other hand, the week was mainly cold from the Rocky Mountains westward, the negative departures in portions of the Southwest ranging up to 12° or more.

No extremely low temperatures occurred, but readings of zero or lower were reported from the upper portions of the Missouri and Mississippi Valleys, and freezing temperatures occurred to the northern portions of the Gulf States and into central Texas.

Precipitation was frequent and heavy from central and eastern Texas northeastward to the Ohio Valley and the Middle Atlantic States, the weekly amounts ranging up to nearly 8 inches in portions of the lower Mississippi Valley and western Tennessee and near-by areas, causing serious floods, some loss of life, and material damage to property.

There was considerable snow during the week from the Ohio Valley and lower Lake region northeastward to southern New England, and some heavy falls were reported in northwestern Iowa and extreme western Wisconsin.

In the western mountains there were heavy falls in the higher elevations of the Cascades of Washington and Oregon and in the central and northern Sierra Nevada, and moderate falls in the Plateau region, extending southward to the Mexican boundary. In the Rocky Mountains there was more or less snow in all districts, though the falls were confined mostly to the western slopes.

## DEPTH OF SNOW ON GROUND

The snow-covered area was not greatly increased during the week, except in the Ohio Valley and portions of the lower Lake region where a considerable area, bare a week ago, now has a good cover. Over New York and New England the cover now ranges from 6 to 10 inches, while in the Lake Superior region and westward to the Red River of the North Valley it ranges from 6 inches to a foot or more, and local depths up to 2 or 3 feet are reported in the extreme northern portions of Michigan and Minnesota.

In the western mountain and Plateau regions there is generally a good cover at the lower elevations, and in the high mountains a good supply is accumulating, a depth of over 6 feet being reported from a point in Washington, though the amounts in the mountains of California are mainly less than have usually accumulated at this period of the winter.

Over the northern drainage of the Ohio and in portions of eastern Nebraska, northern Iowa, and near-by areas there is good protection for winter wheat, and similar conditions exist in most sections of the mountain and Plateau regions, but in the main sections there is little protection.

## ICE IN RIVERS AND HARBORS

There were substantial increases in the ice thickness over the Missouri and Mississippi Rivers and their more northern tributaries, ranging up to 10 inches at Davenport, Iowa, and to 7 inches at Omaha, Nebr. Small increases occurred on the harbors of the Great Lakes, Alpena, Mich., gaining 6 inches, though a few had less than reported last week.

Some ice disappeared from the streams of the Atlantic Coast States, but there were mainly small increases.

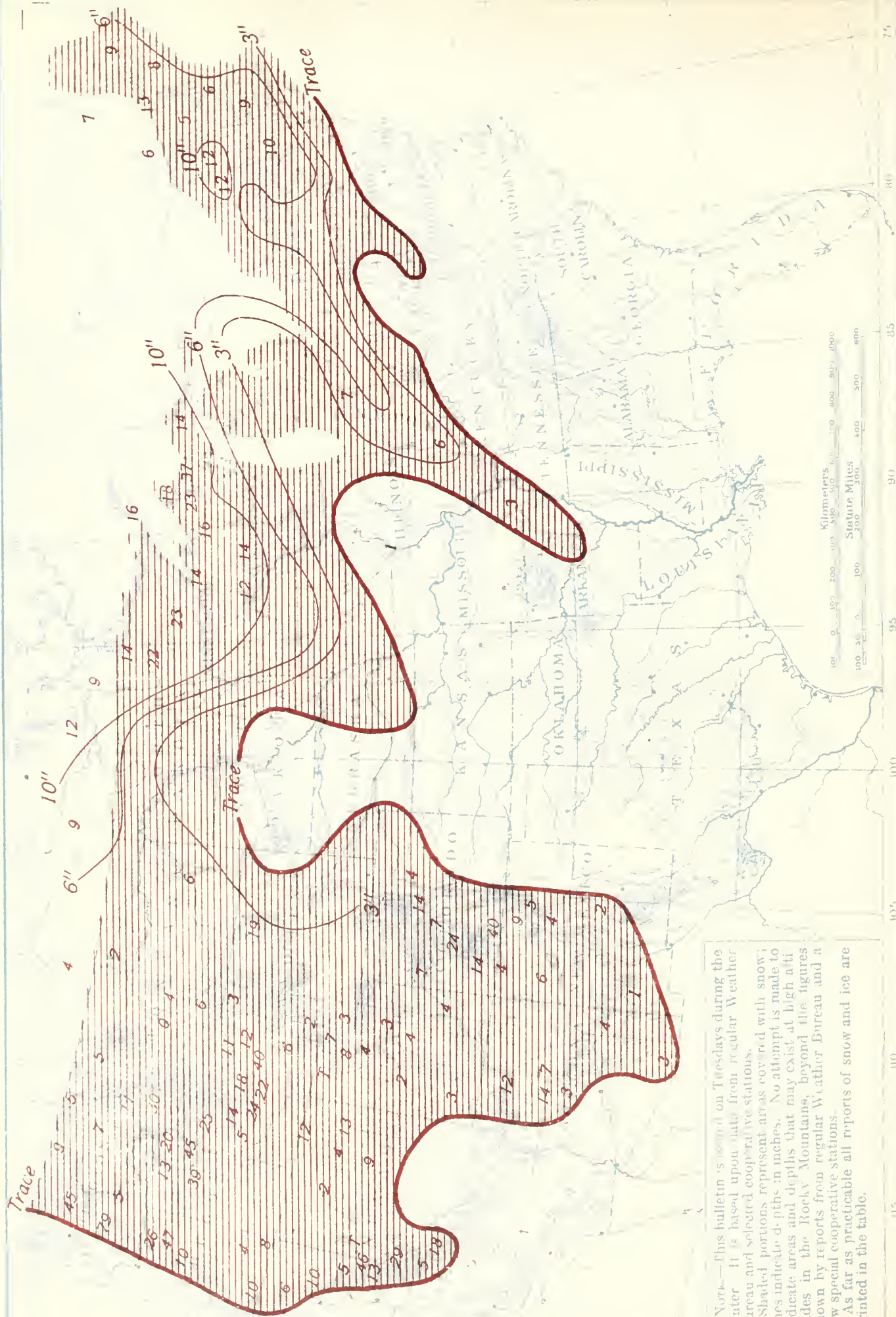
P. C. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., DECEMBER 27, 1926

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Alaska</i>	<i>Inches</i>	<i>Inches</i>	<i>Nebraska</i>	<i>Inches</i>	<i>Inches</i>
Eagle .....	9	.....	Guide Rock .....	2	.....
Juneau .....	3	.....	Lincoln .....	1	.....
Nome .....	8	.....	Omaha .....	3	10.0
<i>Arizona</i>			<i>Nevada</i>		
Flagstaff .....	7	.....	Elko .....	4	.....
Fort Apache .....	4	.....	Hylton .....	9	.....
Grand Canyon .....	12	.....	North Fork .....	10	.....
Prescott .....	3	.....	Winnemucca .....	2	.....
<i>California</i>			<i>New Hampshire</i>		
Huntington Lake ....	18	.....	Concord .....	6	4.5
McCloud .....	6	.....	Pittsburg .....	13	.....
Norden .....	46	.....	<i>New Mexico</i>		
Relief .....	29	.....	Chama .....	9	.....
Sierraville .....	5	.....	Santa Fe .....	4	.....
Yosemite .....	5	.....	Tres Piedras .....	9	.....
<i>Colorado</i>			Truchas .....	6	.....
Cumbres .....	40	.....	<i>New York</i>		
Rico .....	14	.....	Albany .....	7	8.0
<i>Connecticut</i>			Beaver River .....	12	.....
Hartford .....	8	5.0	Buffalo .....	8	↑
New Haven .....	3	0.0	Fredonia .....	7	.....
West Cornwall .....	5	.....	Ithaca .....	6	.....
<i>Idaho</i>			Ogdenburg .....	4	.....
Boise .....	5	.....	Roxbury .....	10	.....
Hailey .....	16	.....	Saranac Lake .....	9	.....
Pierce City .....	30	.....	Syracuse .....	3	.....
Soldier Creek .....	22	.....	<i>Ohio</i>		
<i>Illinois</i>			Cleveland .....	8	0.0
Cairo .....	1	0.0	Dayton .....	2	.....
Peoria .....	0	3.0	Sandusky .....	8	5.5
<i>Indiana</i>			Tiffin .....	13	.....
Cambridge City .....	4	.....	<i>Oregon</i>		
Fort Wayne .....	4	.....	Baker Mine .....	45	.....
Indianapolis .....	4	.....	Detroit .....	10	.....
Marion .....	8	.....	Government Camp .....	36	.....
Royal Center .....	6	.....	Sled Springs .....	20	.....
Terre Haute .....	4	*	<i>Pennsylvania</i>		
<i>Iowa</i>			Erie .....	7	1.0
Des Moines .....	T.	10.0	Franklin .....	6	.....
Dubuque .....	T.	8.0	Johnstown .....	2	.....
Keokuk .....	1	9.0	Williamsport .....	3	.....
Pocahontas .....	6	.....	<i>Rhode Island</i>		
<i>Maine</i>			Block Island .....	2	0.0
Gardiner .....	8	8.0	Kingston .....	4	.....
Greenville .....	9	17.5	Providence .....	6	0.0
Portland .....	2	0.0	<i>South Dakota</i>		
<i>Massachusetts</i>			Pierre .....	0	17.5
Boston .....	7	0.0	Yankton .....	T.	9.0
Holyoke .....	9	9.0	<i>Utah</i>		
Williamstown .....	7	.....	Deseret .....	2	.....
<i>Michigan</i>			Moab .....	4	.....
Alpena .....	4	8.0	Salt Lake City .....	4	.....
Cadillac .....	6	.....	<i>Vermont</i>		
Detroit .....	T.	5.0	Brattleboro .....	7	9.0
Ewen .....	23	.....	St. Johnsbury .....	4	.....
Houghton .....	18	11.5	<i>Washington</i>		
Iron River .....	16	.....	Laurier .....	9	.....
Marquette .....	15	2.0	Paradise Inn .....	79	.....
Sault Ste. Marie .....	11	5.5	Spokane .....	7	.....
<i>Minnesota</i>			Yakima .....	5	.....
Duluth .....	14	14.0	<i>Wisconsin</i>		
Grand Meadow .....	8	.....	Eau Claire .....	14	.....
Moorhead .....	10	16.5	Green Bay .....	3	13.0
St. Paul .....	12	8.0	Madison .....	3	.....
Thief River Falls .....	22	.....	<i>Wyoming</i>		
<i>Montana</i>			Dome Lake .....	19	.....
Bozeman .....	6	.....	Evanston .....	3	.....
Havre .....	2	.....	Sheridan .....	1	.....
Miles City .....	6	.....	South Pass City .....	14	.....
Missoula .....	4	.....	Yellowstone Park .....	3	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., December 27, 1926.



Note.—This bulletin is issued on Tuesdays during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations. Shaded portions represent areas covered with snow; lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations. As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 4

WASHINGTON, D. C., JANUARY 4, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The week was without important adverse weather conditions; in fact, it was unusually warm, as a rule, over most western and northwestern sections, the weekly temperature averages ranging from 10° to 30° above normal from the middle and upper Mississippi Valley westward nearly to the Pacific coast, the greatest comparative warmth, more than 30° above normal, occurring in portions of the upper Missouri Valley. Over the Ohio Valley and Southeastern States the week, as a whole, was somewhat cooler than normal. Temperatures reached the freezing point or lower over most of the States, but they were below zero in only a few localities along the northern border and at high elevations in the mountain districts of the West.

No important precipitation occurred save in the far Northwest and over a rather narrow area from the middle Gulf States northeastward to New England. In the lower Mississippi Valley and near-by areas, considerable rain on the first day or two added further to the flood conditions already existing in that area and much additional damage resulted.

In the central valleys and to the westward, save over Washington, Oregon, and northern California, there was mainly little precipitation, either snow or rain, and large areas in the Great Plains and Rocky Mountain and Plateau regions had none. Much sunshine was the rule over central and western areas, but from Lake Michigan eastward to New England and over portions of the Ohio Valley the week was mainly cloudy, and like conditions prevailed in the far Northwest.

## DEPTH OF SNOW ON GROUND

Over the drainage area of the upper Ohio and northeastward to New England and the St. Lawrence Valley there was a moderate increase in the snow depths over those reported a week ago, and there were slight increases over the northern and eastern portions of Michigan. Elsewhere there appears to have been little new snow, save locally in the high mountains of Oregon and Washington.

Snow depths now range from about 5 inches in the higher elevations of the upper Potomac drainage area to 10 inches in northern New York and to slightly more over most of New England. These snow depths are still insufficient for successful lumbering operations.

In the upper Lakes the depths remain about as reported previously, but from Wisconsin and Minnesota westward to the mountains there were important reductions in the depths as compared with last week, and similar conditions exist in all the western mountain area, save locally in Washington and Oregon.

The greatest depth now reported is 93 inches at a point in the Cascades of Washington, while in California the greatest depth reported is 33 inches, a loss of nearly 15 inches, due mainly to settling, though locally in the Great Basin and other western areas there was much melting and streams were high.

The snow-covered area was not greatly diminished, though in the western districts considerable areas at the lower elevations were uncovered locally.

## ICE IN RIVERS AND HARBORS

There were slight increases in the ice cover on the streams and lakes of the more northern districts from Montana to Lake Superior, but to the southward the ice thickness is mainly less than a week ago.

The prevalence of moderately cold weather over most eastern States caused the formation of some additional ice from Maryland northward, but conditions are not yet favorable for extensive harvesting.

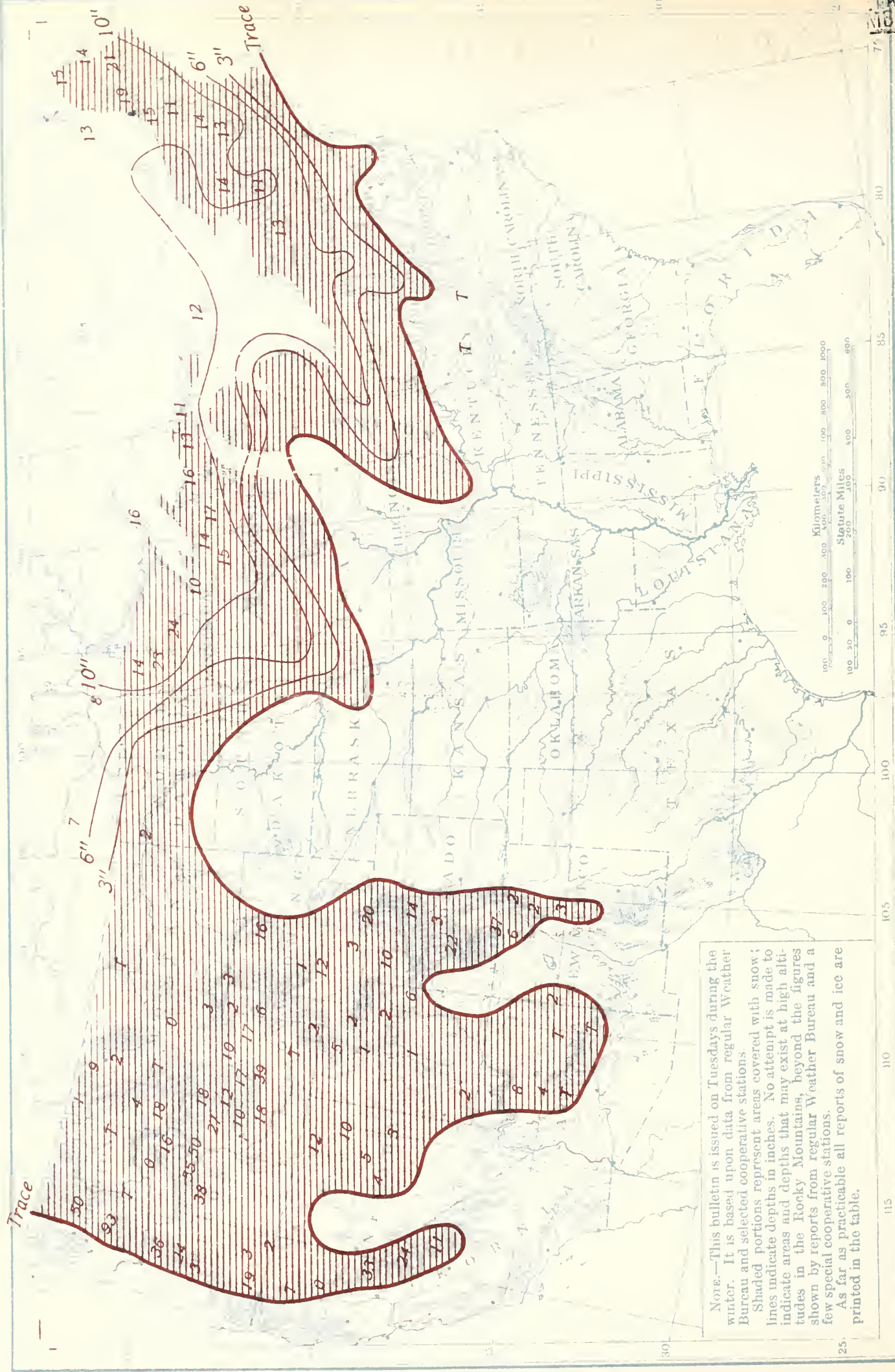
P. O. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 3, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Arizona</i>	<i>Inches</i>	<i>Inches</i>	<i>New Jersey</i>	<i>Inches</i>	<i>Inches</i>
Grand Canyon.....	8	.....	Elizabeth.....	1	.....
Williams.....	4	.....	Newton.....	2	.....
<i>California</i>			<i>New Mexico</i>		
Huntington Lake.....	11	.....	Chama.....	6	.....
Yosemite.....	3	.....	Gamero.....	2	.....
<i>Colorado</i>			Pecos.....	3	.....
Crested Butte.....	22	.....	Taos.....	2	.....
Leadville.....	3	.....	<i>New York</i>		
Steamboat Springs...	10	.....	Binghamton.....	7	.....
<i>Connecticut</i>			Buffalo.....	7	2.0
Hartford.....	7	8.0	Cutchogue.....	1	.....
West Cornwall.....	9	.....	Ithaca.....	6	.....
<i>Idaho</i>			Oswego.....	4	2.0
Boise.....	1	.....	Rochester.....	6	3.0
Ketchum.....	17	.....	Roxbury.....	12	.....
McCall.....	27	.....	Saranac Lake.....	9	.....
Porthill.....	1	.....	Warwick.....	9	.....
Spencer.....	17	.....	Watertown.....	9	.....
<i>Indiana</i>			<i>North Dakota</i>		
Fort Wayne.....	2	.....	Bismarck.....	T.	24.0
Lafayette.....	4	.....	Devils Lake.....	1	.....
Vincennes.....	1	.....	Williston.....	2	18.5
<i>Iowa</i>			<i>Ohio</i>		
Charles City.....	3	.....	Ashland.....	3	.....
Davenport.....	0	8.5	Cincinnati.....	1	0.0
Des Moines.....	0	10.0	Hiram.....	6	.....
Estherville.....	4	.....	Marion.....	6	.....
Iowa Falls.....	2	.....	Toledo.....	3	5.5
Sioux City.....	1	9.5	Wauseon.....	4	.....
<i>Maine</i>			<i>Oregon</i>		
Gardiner.....	10	12.0	Imperial Mine.....	55	.....
Greenville.....	19	16.0	Lakeview.....	2	.....
Millinocket.....	21	.....	Wallowa.....	12	.....
Portland.....	10	0.0	<i>Pennsylvania</i>		
Van Buren.....	15	.....	Confluence.....	5	.....
<i>Massachusetts</i>			Harrisburg.....	1	5.0
Amherst.....	6	.....	Huntingdon.....	5	.....
Concord.....	7	.....	Pittsburgh.....	4	0.0
Holyoke.....	11	10.0	Scranton.....	3	.....
Williamstown.....	6	.....	Towanda.....	9	.....
<i>Michigan</i>			Warren.....	9	*
Alma.....	1	.....	<i>Utah</i>		
Benzonia.....	12	.....	Duchesne.....	2	.....
East Tawas.....	6	.....	Logan.....	5	.....
Escanaba.....	10	15.5	Provo.....	3	.....
Iron Mountain.....	10	.....	Watson.....	6	.....
Ironwood.....	14	.....	<i>Vermont</i>		
Mancelona.....	9	.....	Brattleboro.....	8	10.0
Marquette.....	16	*	Burlington.....	4	*
Newberry.....	13	.....	Northfield.....	7	.....
Port Huron.....	2	6.0	<i>Washington</i>		
<i>Minnesota</i>			Cascade Tunnel.....	50	.....
Duluth.....	10	16.0	Paradise Inn.....	93	.....
Fort Ripley.....	6	.....	<i>West Virginia</i>		
Minneapolis.....	5	.....	Bayard.....	4	.....
Thief River Falls....	23	.....	Elkins.....	4	0.0
Worthington.....	6	.....	Fairmont.....	3	.....
<i>Montana</i>			Wheeling.....	1	.....
Belton.....	9	.....	<i>Wisconsin</i>		
Haugan.....	7	.....	Eau Claire.....	11	.....
Kalispell.....	2	.....	Fond du Lac.....	2	.....
Miles City.....	2	.....	Green Bay.....	2	13.0
<i>Nevada</i>			Medford.....	10	.....
Arthur.....	10	.....	Park Falls.....	15	.....
Austin.....	4	.....	Wausau.....	6	6.0
McGill.....	3	.....	<i>Wyoming</i>		
<i>New Hampshire</i>			Alta.....	6	.....
Durham.....	8	.....	Dome Lake.....	16	.....
Hanover.....	14	.....	Foxpark.....	20	.....
Pittsburg.....	15	.....	Lander.....	1	.....

\*Shore ice. †Floating ice. ‡Ice gorged. §Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., January 3, 1927



NOTE.—This bulletin is issued on Tuesdays during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations. Shaded portions represent areas covered with snow; lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations. As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 5

WASHINGTON, D. C., JANUARY 11, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The week was mainly without important adverse weather, being moderate to decidedly warm for the season from the Mississippi Valley westward and mainly cold in the lower Lakes, Ohio Valley, and Atlantic Coast States.

There was little important precipitation in any part of the country, though small amounts fell in the Northeastern States and some good rains fell over the Pacific Coast States.

The week was mostly clear in the central valleys and Southern States, but moderately cloudy in the Great Lakes region, portions of the Ohio Valley, and along the Pacific coast.

Temperatures were mainly moderate in all districts until toward the end of the week, when high barometric pressure over the interior valleys gave low temperatures in the Southern States, and similar conditions along the northern border from the Great Lakes eastward caused decidedly low temperatures in portions of the Northeastern States. By Tuesday morning temperatures below freezing had penetrated to the Gulf and South Atlantic coasts and to the interior of central Florida, and light frosts were reported as far south as Miami.

A generally unimportant storm, pursuing an unusual path, crossed the entire country during the week. It started on the middle Pacific coast at the beginning and moved northeastward to the upper Lakes, with general rains over the lower elevations of the Pacific States, some snow in the adjacent mountains, and with little or no precipitation, either rain or snow, thence to the northern Plains. On reaching the upper Lakes it curved sharply to the southeast and moved to the Carolina coast, recurring thence to a northeast course along the Atlantic coast where at the close of the week it had developed considerable intensity off the Massachusetts coast. Moderate snow accompanied the southeastward passage of this storm, particularly in portions of the Ohio Valley and southern Appalachian Mountain region, extending eastward to the coasts of North Carolina and Virginia, the fall amounting to 6 inches in central North Carolina.

## DEPTH OF SNOW ON GROUND

Generally there were but small increases in the snow depth as compared with the preceding week, the principal increases occurring in the upper Lake region, portions of the Ohio Valley, and locally from North Carolina to New England.

There was little new snow between the Great Lakes and Rocky Mountains, save near the northern border, and there was mainly little or none in the Rocky Mountain and Plateau regions.

There was some addition to the stored snow in the Sierra Nevada and local gains were noted in the northern Cascades.

Between the Rocky Mountains and the mountains of California, Oregon, and Washington the depth of the snow cover, where any existed as the week began, was materially reduced.

The area with a material snow cover remained about as at the time of the last issue, though a considerable portion of the southern drainage of the Ohio and thence eastward to the Atlantic coast, bare then, now has a light cover, while a corresponding area in the western Plateau, lightly covered then, is now mainly bare. The winter wheat areas east of the Mississippi River are mostly lightly protected, but elsewhere there is little snow cover in the important sections.

## ICE IN RIVERS AND HARBORS

Due to continued moderate cold from the Great Lakes eastward there were general increases in the ice thickness over that reported a week ago. In the western districts there were only slight increases and in some localities small decreases.

The week was favorable for ice harvest, and this work is progressing where the ice has attained a sufficient thickness.

P. O. DAY,

Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 10, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Alaska</i>	<i>Inches</i>	<i>Inches</i>	<i>New York</i>	<i>Inches</i>	<i>Inches</i>
Cordova .....	20	.....	Albany .....	5	10.5
Eagle .....	13	.....	Alfred .....	16	.....
Nome .....	20	.....	Buffalo .....	9	4.0
Tanana .....	10	.....	Canton .....	9	.....
<i>California</i>			Herkimer .....	12	.....
Huntington Lake .....	19	.....	Ithaca .....	6	.....
Norden .....	54	.....	Lowville .....	18	.....
Sierraville .....	5	.....	Poughkeepsie .....	5	.....
<i>Connecticut</i>			Rome .....	11	.....
Hartford .....	5	5.0	Syracuse .....	9	.....
West Cornwall .....	9	.....	Warwick .....	6	.....
<i>Idaho</i>			<i>North Carolina</i>		
Idaho City .....	6	.....	Asheville .....	T.	.....
Ketchum .....	17	.....	Charlotte .....	1	.....
McCall .....	25	.....	Raleigh .....	6	.....
Vienna Mine .....	60	.....	<i>North Dakota</i>		
<i>Illinois</i>			Bismarck .....	T.	24.0
Chicago .....	2	.....	Devils Lake .....	6	.....
Pontiac .....	2	.....	Williston .....	5	19.0
Urbana .....	2	.....	<i>Ohio</i>		
<i>Indiana</i>			Cincinnati .....	2	0.0
Fort Wayne .....	2	.....	Cleveland .....	5	4.5
Indianapolis .....	2	.....	Dayton .....	3	.....
Marion .....	6	.....	Sandusky .....	5	6.0
Terre Haute .....	1	†	Tiffin .....	8	.....
<i>Iowa</i>			<i>Oregon</i>		
Forest City .....	6	.....	Government Camp .....	26	.....
Keokuk .....	T.	10.0	Imperial Mine .....	40	.....
Sioux City .....	T.	8.0	Wallowa .....	9	.....
<i>Kentucky</i>			<i>Pennsylvania</i>		
Greensburg .....	3	.....	Emporium .....	3	.....
Louisville .....	1	0.0	Franklin .....	8	.....
Maysville .....	2	.....	Freeland .....	10	.....
<i>Maine</i>			Harrisburg .....	T.	7.0
Gardiner .....	8	15.0	Mifflintown .....	1	.....
Greenville .....	20	18.0	Parkers Landing .....	6	.....
Houlton .....	8	.....	Philadelphia .....	0	†
Portland .....	4	0.0	Williamsport .....	3	.....
<i>Michigan</i>			<i>South Dakota</i>		
Alpena .....	3	14.0	Huron .....	0	13.0
Cadillac .....	7	.....	Pierre .....	0	12.0
Grayling .....	13	.....	Yankton .....	0	10.0
Houghton .....	17	14.0	<i>Utah</i>		
Humboldt .....	37	.....	Duchesne .....	2	.....
Iron River .....	18	.....	Park City .....	6	.....
Mackinaw .....	8	.....	<i>Vermont</i>		
Newberry .....	17	.....	Brattleboro .....	12	13.0
Port Huron .....	3	11.0	Burlington .....	6	*
Sault Ste. Marie .....	10	12.0	St. Johnsbury .....	12	.....
<i>Minnesota</i>			<i>Virginia</i>		
Duluth .....	12	17.0	Danville .....	4	.....
Ely .....	32	.....	Norfolk .....	3	0.0
Leech Lake Dam .....	20	.....	Randolph .....	2	.....
Moorhead .....	5	23.0	Wytheville .....	4	.....
St. Paul .....	5	*	<i>West Virginia</i>		
<i>Montana</i>			Bayard .....	10	.....
Browning .....	8	.....	Charleston .....	1	.....
Havre .....	1	.....	Elkins .....	3	0.0
Kalispell .....	6	.....	Fairmont .....	1	.....
<i>Nevada</i>			Romney .....	2	.....
Hylton .....	3	.....	Rowlesburg .....	4	.....
North Fork .....	1	.....	<i>Wisconsin</i>		
Reno .....	4	.....	Brodhead .....	1	.....
<i>New Hampshire</i>			Madison .....	4	.....
Berlin .....	15	.....	Milwaukee .....	4	.....
Concord .....	12	14.0	Park Falls .....	11	.....
Keene .....	12	.....	Wausau .....	6	10.0
<i>New Mexico</i>			<i>Wyoming</i>		
Chama .....	4	.....	Foxpark .....	20	.....
Gamero .....	T.	.....	South Pass City .....	8	.....

\*Shore ice. †Floating ice. ‡Ice gorged. §Measurement impracticable.  
T. indicates trace.



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CHARLES F. MARVIN, Chief

No. 6

WASHINGTON, D. C., JANUARY 18, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The week just closed was distinctly winterish over most districts from the Rocky Mountains eastward, while over the far West it was more favorable.

Severe cold occurred on several dates, particularly from Friday to Sunday in the central valleys and to the eastward, when freezing temperatures extended to the Gulf and South Atlantic coasts and into the central districts of the Florida Peninsula, with severe damage in the important trucking regions from Texas eastward, and as yet undetermined losses in the citrus fruit districts.

The weekly averages of temperature were far below normal in the central valleys and Southeastern States, but they were slightly above in New England and from the Rocky Mountains westward, the week being warm over the middle Plateau.

Precipitation was mainly light, though there were good rains and considerable snow in portions of the far Northwest, and moderately heavy rains with local heavy snows from the southern Plains northeast to the Great Lakes, and along or near the coast from the Chesapeake Bay region to New England.

Cloudy weather was rather general over the northern districts, but in the central valleys and Southeastern States clear and cold weather was much in evidence, while in the Southwest it was mainly clear and warm.

## DEPTH OF SNOW ON GROUND

Over most of the country where snow usually falls, save in the mountains of California and portions of the Southwest, there was more or less snow, but only over limited areas was the fall of importance. These covered the territory from eastern Kansas and northern Missouri to Wisconsin and the lower Michigan Peninsula, from southeastern Pennsylvania to New England, and over the western mountain districts from Colorado and Utah northwest to Montana, Idaho, and Washington.

On the 13th and 14th general snows occurred from the middle Plains northeastward to the Great Lakes, with local heavy falls in the middle Mississippi Valley States and northeastward to the vicinity of Lake Michigan, continuing on the 15th over the Atlantic coast districts from Pennsylvania to New England. Light snows occurred near the end of the week over the northern districts, and at the close snow had again set in over portions of the middle Mississippi Valley and southern Plains and continued in the Northwest.

Compared with the preceding week the snow depths were nearly everywhere greater, save in the Appalachian Mountain region, over the southern drainage of the Ohio, and locally in the mountains of California and Oregon.

The snow-covered area was materially diminished in the Ohio Valley and over the Eastern States from Maryland southward, but there was a distinct gain in the middle Mississippi and lower Missouri Valleys.

Practically all the northern and central portions of the winter wheat area now have a considerable snow cover, save in the middle Plains, which are largely bare.

## ICE IN RIVERS AND HARBORS

Cold weather over the eastern two-thirds of the country caused a material increase in the ice thickness where it had previously formed and there was some extension southward. The greatest increases, 2 to 8 inches, were reported from the Great Lakes, and there were material, though usually less, increases on the lakes and rivers of the Middle Atlantic States.

The weather was mainly favorable for ice harvest over all northern and central districts and good progress in this work was reported generally.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 17, 1927

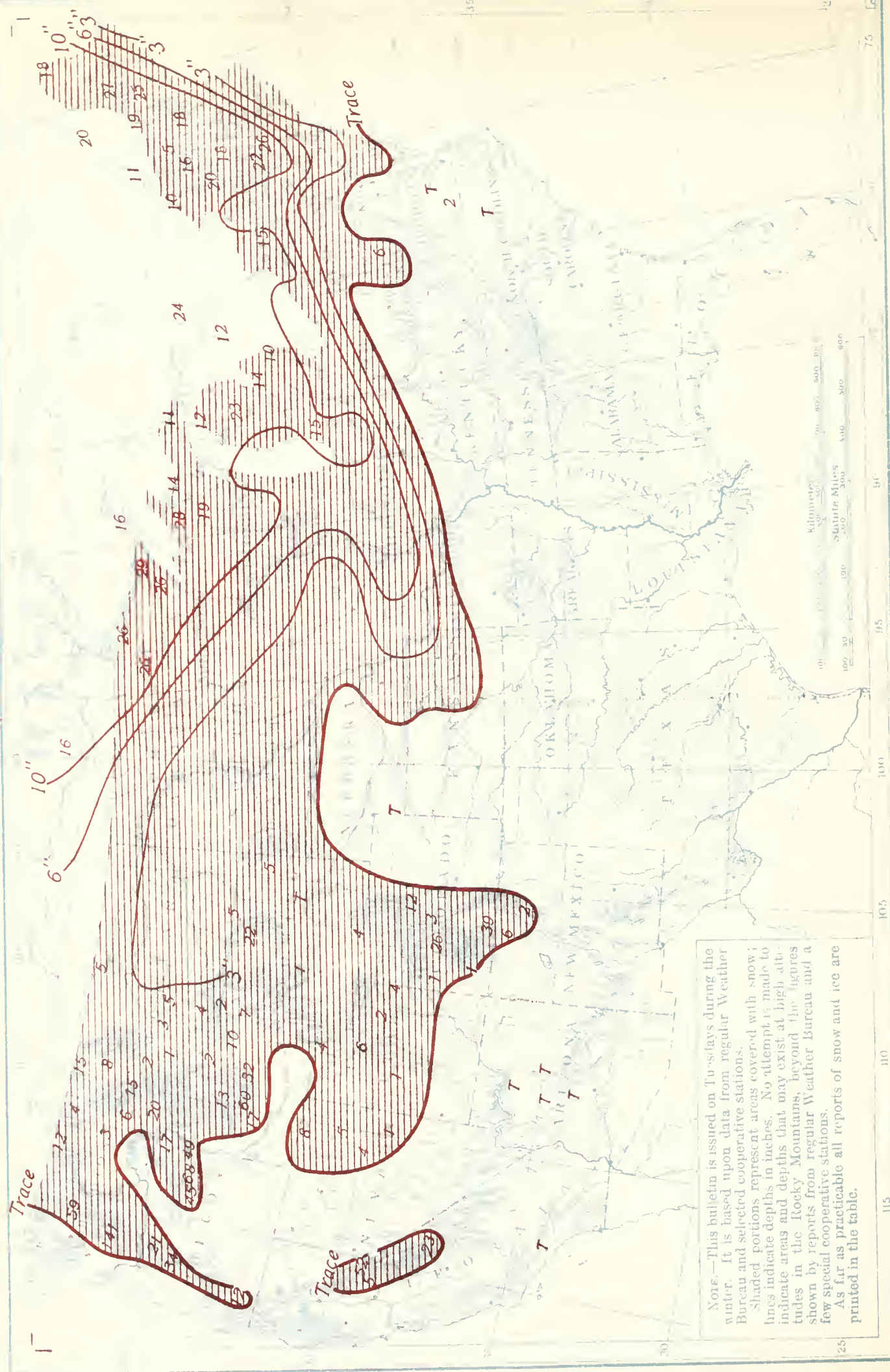
Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Colorado</i>	<i>Inches</i>	<i>Inches</i>	<i>New Hampshire</i>	<i>Inches</i>	<i>Inches</i>
Cumbres .....	39	.....	Concord .....	20	15.0
Dillon .....	12	.....	Hanover .....	18	.....
Leadville .....	3	.....	Pittsburg .....	19	.....
<i>Connecticut</i>			<i>New Jersey</i>		
Hartford .....	10	10.0	Bridgeton .....	4	.....
New Haven .....	2	0.0	Elizabeth .....	5	.....
<i>Delaware</i>			Lakewood .....	5	.....
Millsboro .....	2	.....	Newton .....	12	.....
Wilmington .....	4	.....	<i>New York</i>		
<i>Idaho</i>			Albany .....	15	12.0
Hailey .....	8	.....	Beaver River .....	20	.....
Porthill .....	4	.....	Binghamton .....	3	.....
Soldier Creek .....	16	.....	Fredonia .....	7	.....
<i>Illinois</i>			Malone .....	12	.....
Chicago .....	8	.....	New York .....	4	0.0
Monmouth .....	8	.....	Ogdensburg .....	10	.....
Peoria .....	9	7.0	Oswego .....	6	8.0
Springfield .....	6	.....	Rochester .....	11	7.0
<i>Indiana</i>			Roxbury .....	22	.....
Indianapolis .....	3	.....	Saratoga Springs .....	18	.....
Notre Dame .....	11	.....	<i>North Dakota</i>		
Royal Center .....	10	.....	Devils Lake .....	5	.....
Terre Haute .....	2	4.0	Williston .....	5	22.0
<i>Iowa</i>			<i>Ohio</i>		
Albia .....	3	.....	Ashland .....	2	.....
Charles City .....	3	.....	Hiram .....	6	.....
Des Moines .....	1	10.5	Marion .....	4	.....
Dubuque .....	3	14.0	Toledo .....	5	9.0
<i>Kansas</i>			<i>Oregon</i>		
Osage City .....	2	.....	Baker Mine .....	49	.....
Topeka .....	2	.....	Harrison Mine .....	45	.....
<i>Maine</i>			Sled Springs .....	17	.....
Greenville .....	27	19.0	<i>Pennsylvania</i>		
Portland .....	10	0.0	Confluence .....	2	.....
Van Buren .....	18	.....	Erie .....	5	10.0
<i>Massachusetts</i>			Johnstown .....	6	.....
Boston .....	3	0.0	Philadelphia .....	5	†
Holyoke .....	16	14.0	Reading .....	2	†
Williamstown .....	14	.....	Scranton .....	6	.....
<i>Michigan</i>			Warren .....	12	.....
Battle Creek .....	11	.....	<i>Rhode Island</i>		
Detroit .....	11	8.5	Block Island .....	2	0.0
Escanaba .....	14	18.0	Kingston .....	2	.....
Grand Rapids .....	6	.....	Providence .....	1	0.0
Ironwood .....	20	.....	<i>South Dakota</i>		
Ludington .....	5	.....	Yankton .....	T.	12.0
Marquette .....	14	4.0	<i>Utah</i>		
<i>Minnesota</i>			Logan .....	4	.....
Baudette .....	26	.....	Watson .....	4	.....
Ely .....	29	.....	<i>Vermont</i>		
Fort Ripley .....	5	.....	Brattleboro .....	17	14.0
Minneapolis .....	6	.....	Burlington .....	5	*
Moorhead .....	5	24.0	Northfield .....	14	.....
Mora .....	6	.....	<i>Washington</i>		
<i>Missouri</i>			Cascade Tunnel .....	59	.....
Brunswick .....	4	.....	Laurier .....	12	.....
Hannibal .....	6	*†	Paradise Inn .....	141	.....
St. Joseph .....	2	.....	Spokane .....	3	.....
Unionville .....	6	.....	Yakima .....	6	.....
<i>Montana</i>			<i>Wisconsin</i>		
Belton .....	15	.....	Green Bay .....	9	15.0
Haugan .....	15	.....	La Crosse .....	9	19.0
Helena .....	3	.....	Madison .....	8	.....
Miles City .....	2	.....	Medford .....	10	.....
Missoula .....	2	.....	<i>Wyoming</i>		
Red Lodge .....	1	.....	Alta .....	7	.....
<i>Nevada</i>			Dome Lake .....	22	.....
Arthur .....	5	.....	Newcastle .....	5	.....
Elko .....	1	.....	Sheridan .....	5	.....
McGill .....	1	.....	Yellowstone Park .....	2	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable. T. indicates trace.

P. C. DAY,

Meteorologist, in charge of Division.

# Depth of Snow on Ground, 8 p. m., January 17, 1927



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 7

WASHINGTON, D. C., JANUARY 25, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

Conditions during the week just closed were directly reversed as to temperature compared with the preceding week, though precipitation conditions were somewhat similar as to the areas of important falls.

During the week just closed, low temperatures prevailed throughout most central and western districts, particularly from the upper and middle Mississippi Valley westward where the weekly averages were mainly from 10° to 20° below normal, and in the far Northwest some unusually low temperatures were experienced. On the other hand, the week was unseasonably warm over the eastern third of the country, the weekly means being largely from 10° to 20° above normal, and some near record-breaking high temperatures occurred.

Precipitation was heavy and locally of almost daily occurrence in the middle Mississippi and lower Ohio Valleys, and more or less moderate precipitation occurred over considerable near-by areas. Beneficial precipitation occurred over much of California and heavier falls in portions of the far Northwest. Frequent rains, at times heavy to excessive, in the lower Ohio Valley and near-by areas caused high waters in the main streams and much damage from flooding in the lowlands.

Much cloudy, rainy weather prevailed from the southern Plains northeastward to the Ohio Valley and lower Lake region, a number of stations in that area reporting none or only a few hours of sunshine during the entire week.

## DEPTH OF SNOW ON GROUND

Some snow fell over most districts where it had previously occurred, except in the Ohio Valley and Middle Atlantic States where the precipitation was in the form of rain. Over the western districts such snow as fell remained largely unmelted on account of the continued cold, but over most eastern districts unusual warmth carried off much of the cover already existing.

In the far Northwest there were local heavy snows, and in the mountains of Washington, Oregon, and Idaho the stored snow was materially increased. Moderate increases in snow depth occurred in most other western mountain districts, and the amount of stored snow is mainly satisfactory.

Compared with the preceding week, the snow-covered area is somewhat greater, but the depths have materially decreased from the northern drainage of the Ohio to New England, the decreases over much of the area ranging from 5 to 10 inches.

The northern and central portions of the winter wheat area west of the Mississippi River have a slight snow cover, and there is still a good cover over the northern sections to eastward despite the considerable melting during the week. The winter wheat areas in the districts from the Rocky Mountains westward are now mainly well protected.

## ICE IN RIVERS AND HARBORS

Increases are reported in the amounts of ice on the western rivers and lakes due to the prevailing cold, but over eastern districts there was more or less loss due to unusual warmth.

On the Missouri and its upper tributaries the thickness now ranges from 18 inches at Omaha to 2 feet or more in the Dakotas, and the upper Mississippi has somewhat less. Not much change occurred in the ice condition on the Great Lakes, the thickness in the principal harbors ranging from 8 inches on Lake Ontario to nearly 2 feet on western Lake Superior.

The Ohio continues open and in flood, and much ice disappeared from the rivers of the Atlantic coast south of the Hudson.

Conditions were favorable for ice harvest in western and northern districts, but were generally unfavorable over the more eastern districts.

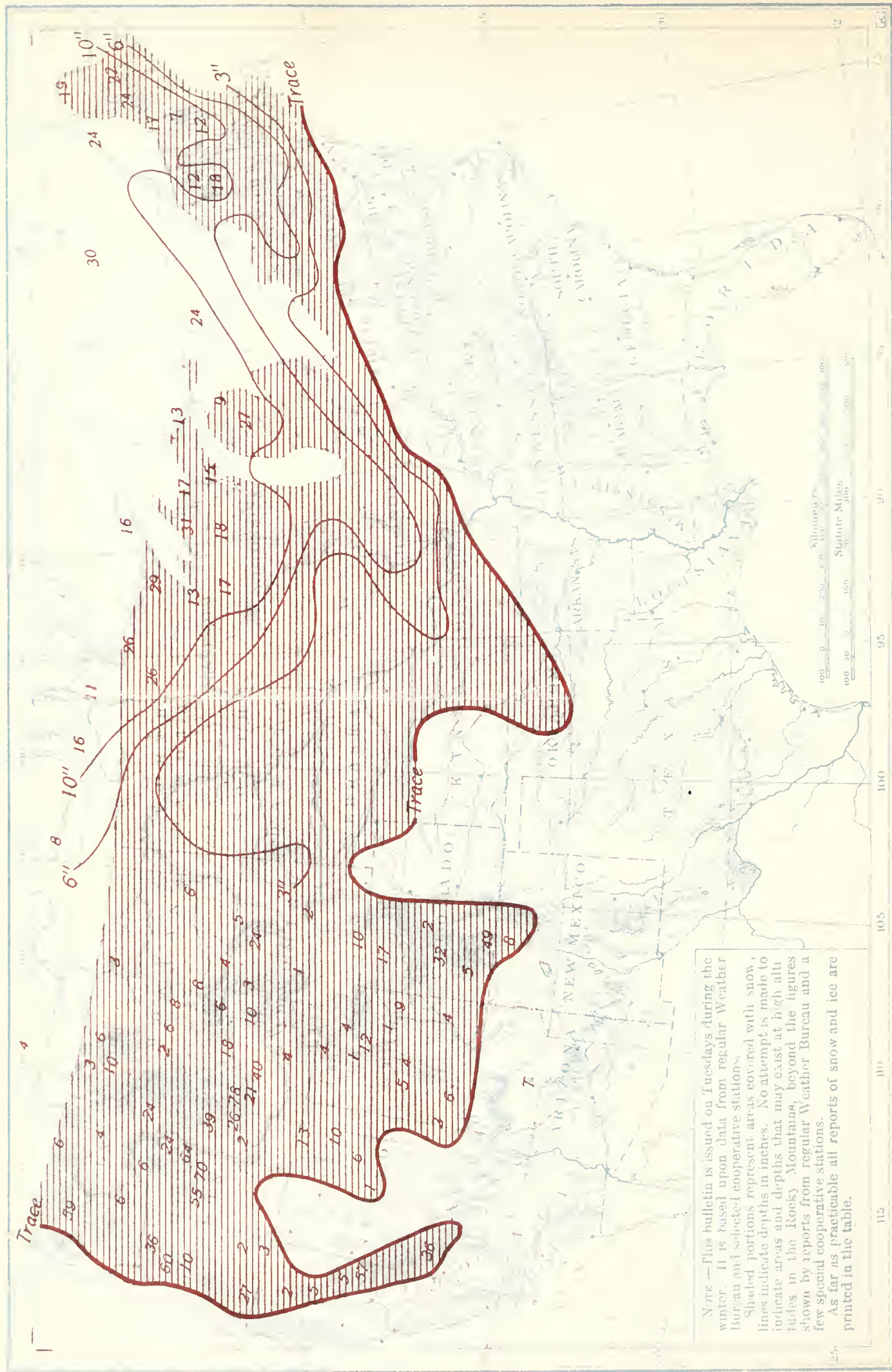
## SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 24, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Arizona</i>	<i>Inches</i>	<i>Inches</i>	<i>Nebraska</i>	<i>Inches</i>	<i>Inches</i>
Grand Canyon.....	3	.....	Guide Rock.....	2	.....
Pinedale.....	2	.....	Imperial.....	2	.....
Williams.....	4	.....	Omaha.....	T.	18.0
<i>California</i>			<i>New Hampshire</i>		
Huntington Lake....	36	.....	Concord.....	10	16.0
McCloud.....	2	.....	Durham.....	6	.....
Norden.....	57	.....	Pittsburg.....	17	.....
Sierraville.....	5	.....	<i>New Mexico</i>		
<i>Colorado</i>			Chama.....	8	.....
Crested Butte.....	32	.....	Tres Piedras.....	2	.....
Cumbres.....	49	.....	<i>New York</i>		
Grand Junction.....	1	.....	Albany.....	5	10.0
Rico.....	5	.....	Buffalo.....	3	8.0
Steamboat Springs...	17	.....	Canton.....	4	.....
<i>Connecticut</i>			Lake Placid.....	3	.....
Hartford.....	4	9.0	Rochester.....	5	†
West Cornwall.....	7	.....	Warwick.....	5	.....
<i>Idaho</i>			Watertown.....	5	.....
Idaho City.....	26	.....	<i>North Dakota</i>		
Ketchum.....	21	.....	Bismarck.....	2	25.0
Pocatello.....	4	.....	Devils Lake.....	4	.....
Vienna Mine.....	78	.....	Ellendale.....	2	.....
<i>Illinois</i>			Williston.....	6	26.0
Chicago.....	4	.....	<i>Ohio</i>		
Peoria.....	7	8.0	Cleveland.....	T.	9.0
Walnut.....	5	.....	Sandusky.....	3	10.0
<i>Indiana</i>			Tiffin.....	3	.....
Fort Wayne.....	4	.....	Wauseon.....	3	.....
Lafayette.....	4	.....	<i>Oklahoma</i>		
Marion.....	6	.....	Broken Arrow.....	1	.....
<i>Iowa</i>			Oklahoma City.....	1	.....
Albia.....	2	.....	<i>Oregon</i>		
Davenport.....	2	10.0	Detroit.....	10	.....
Forest City.....	6	.....	Government Camp... 36	.....	
Sioux City.....	T.	15.0	Imperial Mine..... 70	.....	
<i>Maine</i>			Portland.....	9	0.0
Gardiner.....	14	14.0	Wallowa.....	10	.....
Greenville.....	24	18.0	<i>Pennsylvania</i>		
Millinocket.....	22	.....	Scranton.....	3	.....
Portland.....	3	0.0	Towanda.....	2	.....
<i>Massachusetts</i>			Warren.....	5	.....
Boston.....	2	0.0	<i>South Dakota</i>		
Holyoke.....	10	14.0	Huron.....	2	18.0
<i>Michigan</i>			Pierre.....	3	18.0
Alpena.....	9	15.0	Rapid City.....	2	.....
Bloomington.....	5	.....	Yankton.....	T.	16.0
Detroit.....	4	7.5	<i>Utah</i>		
Grand Haven.....	6	.....	Moab.....	4	.....
Houghton.....	15	16.0	Modena.....	2	.....
Iron Mountain.....	16	.....	Park City.....	12	.....
Lansing.....	4	.....	<i>Vermont</i>		
Port Huron.....	6	20.0	Brattleboro.....	9	14.0
Sault Ste. Marie....	13	15.0	Burlington.....	1	*
<i>Minnesota</i>			St. Johnsbury.....	9	.....
Duluth.....	13	22.5	<i>Washington</i>		
Fort Ripley.....	9	.....	Cascade Tunnel.....	59	.....
Leech Lake Dam.....	22	.....	Laurier.....	6	.....
Moorhead.....	7	26.5	Walla Walla.....	6	.....
St. Paul.....	8	10.0	Yakima.....	6	.....
Worthington.....	3	.....	<i>Wisconsin</i>		
<i>Missouri</i>			Fond du Lac.....	14	.....
Brunswick.....	4	.....	Green Bay.....	13	15.0
Columbia.....	2	.....	Milwaukee.....	5	.....
Hannibal.....	5	*†	Park Falls.....	16	.....
St. Louis.....	1	†	Wausau.....	10	15.0
<i>Montana</i>			<i>Wyoming</i>		
Bozeman.....	7	.....	Casper.....	2	.....
Havre.....	3	.....	Evanston.....	4	.....
Kalispell.....	10	.....	Lander.....	1	.....
Miles City.....	6	.....	Sheridan.....	5	.....

P. C. DAY,  
Meteorologist, in charge of Division.

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., January 24, 1927



Note.—This bulletin is issued on Tuesdays during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations.

Shaded portions represent areas covered with snow, lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations.

As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 8

WASHINGTON, D. C., FEBRUARY 1, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The severe cold over the northern districts from the Rocky Mountains eastward at the beginning of the week continued over the eastern districts until Thursday, but was followed quickly by warmer weather, and the middle and latter parts of the week had mainly moderate winter temperatures, though at the end it had become decidedly colder over the Lake region and St. Lawrence Valley, and it was materially colder in the Appalachian Mountains and near-by areas.

The week, as a whole, was warmer than normal over the entire country save for a narrow area along the immediate Pacific coast and locally in the middle Plateau and along the Atlantic coast where it was normal or slightly lower.

Precipitation was rather frequent in the far Northwest, but elsewhere there was little until near the end when it was rather general, but principally light, over the eastern third of the country. The total fall for the week was heaviest along the Pacific coast from northern California to Washington where it ranged from about 1 to nearly 4 inches. Amounts from 0.5 to 1 inch occurred from Arkansas eastward to the Carolinas and in the central and southern portions of the Appalachian Mountains. Elsewhere the amounts were frequently not more than traces.

## DEPTH OF SNOW ON GROUND

There was practically no snowfall during the week to eastward of the Rocky Mountains that remained unmelted at the close, except locally in the upper Lake region and northern New England. In the northern mountain districts of the West, particularly at the higher elevations from central California to Washington, including the mountains of eastern Oregon, Idaho, and near-by areas, there were material additions to the snow cover reported a week ago.

On account of the moderate temperatures during the latter part of the week there was extensive melting or settling in nearly all districts where snow existed at the beginning, only a few areas in the upper Lake region and New England maintaining the depths reported a week ago. In the western Mountain States there was a material reduction of the depths at the lower levels, although at some of the higher levels there were important increases. Despite the large reduction in the depth of snow, as compared with the previous week, the area with an appreciable cover has not changed greatly, save in the lower Missouri Valley where the slight covering existing last week has mainly disappeared. In the districts from Missouri and Iowa eastward the depth of the cover is now from 2 to 5 inches less than a week ago, but in more northern districts losses were mainly less.

In the high mountains from central California to Washington there have been increases ranging up to nearly 2 feet, and the amount and condition of the packed snow is generally good.

## ICE IN RIVERS AND HARBORS

Moderate warmth caused some reduction in the thickness over the more southern districts where ice was reported a week ago, while severe cold during the early part of the period and moderate cold near the end caused increases in the more northern districts. In the Missouri River the ice now ranges from 15 inches at Sioux City to 26 inches at Williston, with 28 inches on the Red River of the North at Moorhead, while on the Mississippi it ranges from 13 inches at Keokuk to 22 inches at La Crosse. In the harbors of the Great Lakes the ice now ranges from 10 inches, or somewhat less, on the lower Lakes to 20 inches in the northern portions of Huron and Michigan and to 25 inches at the western end of Superior. The week was mainly favorable for ice harvest and this work continued.

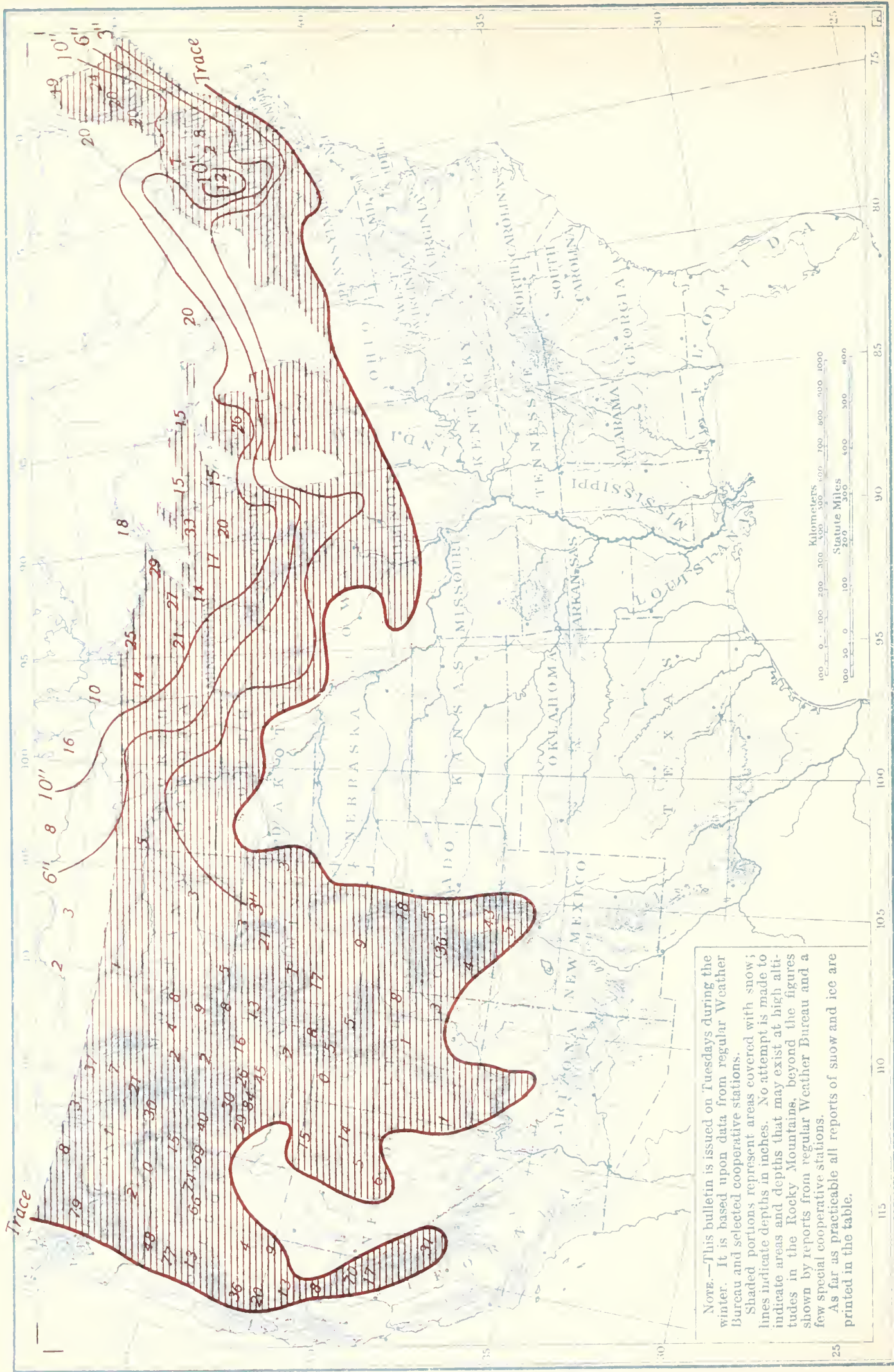
P. C. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., JANUARY 31, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
Inches	Inches	Inches	Inches	Inches	Inches
<i>Alaska</i>			<i>New Hampshire</i>		
Cordova .....	24	.....	Berlin .....	5	.....
Eagle .....	11	.....	Concord .....	7	16.0
Juneau .....	9	.....	Hanover .....	8	.....
Nome .....	36	.....	Keene .....	10	.....
<i>California</i>			Pittsburg .....	20	.....
Blue Canyon .....	17	.....	<i>New York</i>		
McCloud .....	13	.....	Albany .....	T.	10.0
Norden .....	70	.....	Beaver River .....	12	.....
<i>Colorado</i>			Buffalo .....	1	12.0
Cumbres .....	43	.....	Herkimer .....	9	.....
Dillon .....	18	.....	Lowville .....	8	.....
Leadville .....	5	.....	Ogdensburg .....	3	.....
<i>Idaho</i>			Oswego .....	2	10.5
Hailey .....	17	.....	Poughkeepsie .....	3	.....
McCall .....	40	.....	Rochester .....	T.	†
Mascot Mine .....	45	.....	Rome .....	5	.....
Pocatello .....	2	.....	Roxbury .....	7	.....
Porthill .....	3	.....	Saranac Lake .....	6	.....
Soldier Creek .....	32	.....	Saratoga Springs .....	6	.....
Spencer .....	16	.....	<i>Ohio</i>		
<i>Illinois</i>			Cleveland .....	T.	5.0
Peoria .....	2	5.0	Toledo .....	0	6.0
Pontiac .....	4	.....	<i>Oregon</i>		
Walnut .....	3	.....	Baker Mine .....	69	.....
<i>Iowa</i>			Bull Run Lake .....	77	.....
Charles City .....	1	.....	Government Camp .....	48	.....
Des Moines .....	0	12.0	Harrison Mine .....	66	.....
Dubuque .....	1	14.0	Lakeview .....	9	.....
Estherville .....	4	.....	Siskiyou .....	20	.....
Keokuk .....	T.	13.0	Welches .....	11	.....
<i>Maine</i>			<i>Pennsylvania</i>		
Gardiner .....	10	12.0	Erie .....	0	8.5
Greenville .....	20	19.0	Franklin .....	1	.....
Houlton .....	11	.....	<i>South Dakota</i>		
Portland .....	1	0.0	Huron .....	0	17.5
Van Buren .....	19	.....	Pierre .....	T.	20.0
<i>Massachusetts</i>			Yankton .....	0	17.0
Amherst .....	1	.....	<i>Utah</i>		
Concord .....	2	.....	Logan .....	5	.....
Holyoke .....	6	16.0	Moab .....	3	.....
<i>Michigan</i>			Price .....	1	.....
Alma .....	3	.....	Watson .....	8	.....
Battle Creek .....	1	.....	<i>Vermont</i>		
Cadillac .....	11	.....	Brattleboro .....	9	15.0
Detroit .....	T.	6.5	Burlington .....	T.	*
Escanaba .....	15	21.5	Northfield .....	5	.....
Ironwood .....	22	.....	St. Johnsbury .....	8	.....
Ludington .....	3	.....	<i>Washington</i>		
Mackinaw .....	15	.....	Cascade Tunnel .....	79	.....
Marquette .....	15	8.0	Laurier .....	8	.....
Saginaw .....	2	.....	Spokane .....	1	.....
<i>Minnesota</i>			Yakima .....	2	.....
Duluth .....	14	25.5	<i>Wisconsin</i>		
Grand Meadow .....	8	.....	Brodhead .....	4	.....
Minneapolis .....	6	.....	Eau Claire .....	10	.....
Roseau .....	14	.....	Green Bay .....	8	15.0
Virginia .....	27	.....	La Crosse .....	3	22.0
Worthington .....	4	.....	Madison .....	4	.....
<i>Montana</i>			Medford .....	14	.....
Haugan .....	21	.....	Racine .....	4	.....
Helena .....	4	.....	Rhineland .....	20	.....
Kalispell .....	7	.....	Wausau .....	11	16.5
Loweth .....	8	.....	<i>Wyoming</i>		
Miles City .....	3	.....	Alta .....	13	.....
Red Lodge .....	5	.....	Dixon .....	9	.....
<i>Nevada</i>			Dome Lake .....	21	.....
Arthur .....	14	.....	Newcastle .....	3	.....
Austin .....	6	.....	Sheridan .....	3	.....
Hylton .....	5	.....	South Pass City .....	17	.....
North Fork .....	4	.....	Yellowstone Park .....	8	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., January 31, 1927



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 9

WASHINGTON, D. C., FEBRUARY 8, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The week just closed was unusually mild for winter and much cloudy weather prevailed, though precipitation was rather infrequent and mainly moderate to light.

Save for small areas in New England, northern New York and along the southern California coast, the average temperature for the week was everywhere above normal, the positive departures between the Rocky and Appalachian Mountains ranging from 10° to 20°. Day-to-day temperature changes were mainly slight, save along the northern border where some subzero temperatures occurred. Freezing weather was not experienced over the Gulf and South Atlantic States nor in the Pacific Coast States, save at the higher elevations.

Precipitation over the Pacific Coast States was generous and confined mainly to the earlier half of the week, while from the eastern Plains to the Atlantic coast it occurred mainly during the latter half, and, while not heavy, was sufficient for present needs, save in portions of the Gulf and South Atlantic States where mainly no rain occurred during the entire week. In the middle Mississippi and Ohio Valley regions, where the smaller streams were already full, some additional flooding occurred.

Over most of the western Plains, and in the Rocky Mountain and Plateau regions, precipitation was light or quite absent.

## DEPTH OF SNOW ON GROUND

Considerable snow or sleet fell during the 5th and 6th over districts from the Great Lakes eastward and in portions of the Middle Atlantic States, but rain and warmer weather melted much of it, save in the more northern localities.

Over the upper Lakes there were increases ranging up to 10 inches or more, and similar increases were reported in northern Minnesota and eastern North Dakota, and generally over the northern portions of New York and New England. South of these areas, the cover, where snow was reported a week ago, is now several inches less or has disappeared entirely, save in portions of Pennsylvania where little change occurred. Over the northern Great Plains and the eastern slopes of the Rocky Mountains there were mainly moderate decreases.

In the western mountains there were important increases over the higher elevations of Idaho, Washington, Oregon, California, and Nevada, and in some cases quite large gains were noted. In general, the snow in the mountains from central California to Washington, and also in Nevada and Idaho and on the western slopes of the Rockies from Colorado northward, is near the normal amount and the outlook for water during the coming summer is satisfactory. Conditions are not so favorable in the southern mountain section.

Compared with the preceding week, the snow-covered area has decreased considerably in the far West and to some extent in the upper Missouri Valley, and has practically disappeared from Iowa and Missouri to southern Michigan and northern Ohio, but there was some increase in southern Pennsylvania.

## ICE IN RIVERS AND HARBORS

Warm weather during the past week, attending high waters, broke up considerable ice in the lower reaches of the streams having a substantial ice cover, and much floating ice is now reported. In the middle course of the Missouri River and the upper course of the Mississippi, most points where the ice remains firm report decrease in thickness, and most harbors of the lower Lakes report decrease, breaking up, or disappearance of the ice. In the upper Lakes there has been less change, while several points near the Canadian border from North Dakota to Maine report an increase in thickness.

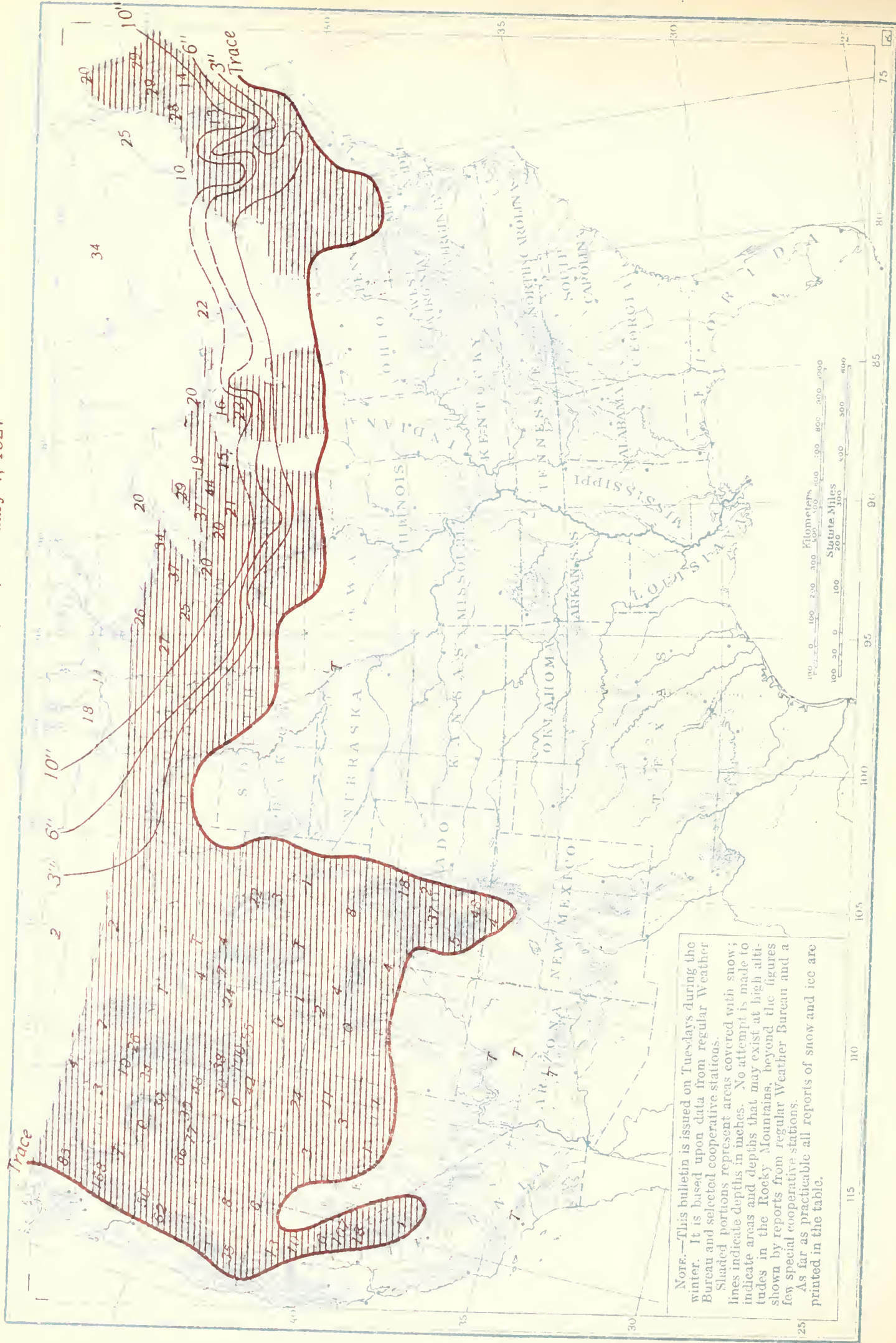
P. C. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., FEBRUARY 7, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>California</i>	<i>Inches</i>	<i>Inches</i>	<i>Nevada</i>	<i>Inches</i>	<i>Inches</i>
Blue Canyon .....	18	.....	Arthur .....	11	.....
McCloud .....	13	.....	Elko .....	2	.....
Norden .....	107	.....	Gold Creek .....	24	.....
Sierraville .....	6	.....	Winnemucca .....	3	.....
Yosemite .....	1	.....	<i>New Hampshire</i>		
<i>Colorado</i>			Berlin .....	10	.....
Crested Butte .....	37	.....	Concord .....	6	17.0
Cumbres .....	48	.....	Hanover .....	13	.....
Leadville .....	2	.....	Keene .....	10	.....
Rico .....	5	.....	Pittsburg .....	28	.....
<i>Connecticut</i>			<i>New Mexico</i>		
Hartford .....	0	‡	Chama .....	4	.....
New Haven .....	T.	0.0	<i>New York</i>		
West Cornwall .....	4	.....	Albany .....	1	6.0
<i>Idaho</i>			Buffalo .....	T.	8.0
Idaho City .....	30	.....	Canton .....	4	.....
Ketchum .....	32	.....	Corinth .....	9	.....
Kirkham .....	28	.....	Herkimer .....	3	.....
McCall .....	48	.....	Malone .....	12	.....
Mackay .....	6	.....	Norwich .....	4	.....
Mascot Mine .....	55	.....	Oswego .....	0	10.0
Porthill .....	4	.....	Roxbury .....	4	.....
Spencer .....	24	.....	Saranac Lake .....	12	.....
Vienna Mine .....	100	.....	Saratoga Springs .....	4	.....
<i>Iowa</i>			Warwick .....	1	.....
Charles City .....	T.	.....	Watertown .....	2	.....
Des Moines .....	0	†	<i>North Dakota</i>		
Dubuque .....	0	12.0	Bismarck .....	T.	25.0
Keokuk .....	0	†	Devils Lake .....	8	.....
<i>Maine</i>			Ellendale .....	1	.....
Eastport .....	10	0.0	Williston .....	4	27.0
Gardiner .....	14	13.0	<i>Ohio</i>		
Greenville .....	29	30.0	Cleveland .....	0	†
Millinocket .....	29	.....	Sandusky .....	0	6.0
Portland .....	6	0.0	<i>Oregon</i>		
Van Buren .....	20	.....	Baker Mine .....	80	.....
<i>Massachusetts</i>			Fish Lake .....	35	.....
Concord .....	1	.....	Government Camp .....	50	.....
Holyoke .....	4	16.0	Imperial Mine .....	77	.....
Williamstown .....	1	.....	Sled Springs .....	30	.....
<i>Michigan</i>			<i>Pennsylvania</i>		
Alpena .....	2	18.0	Chambersburg .....	2	.....
Ann Arbor .....	1	.....	Gettysburg .....	3	.....
Benzonia .....	8	.....	Harrisburg .....	T.	*
Detroit .....	T.	6.5	Mifflintown .....	1	.....
Escanaba .....	15	22.0	<i>Utah</i>		
Ewen .....	37	.....	Logan .....	2	.....
Grayling .....	22	.....	Watson .....	4	.....
Houghton .....	29	15.0	<i>Vermont</i>		
Humboldt .....	44	.....	Bellows Falls .....	16	.....
Iron Mountain .....	13	.....	Brattleboro .....	7	16.0
Iron River .....	24	.....	Burlington .....	2	6.0
Mackinaw .....	16	.....	Northfield .....	7	.....
Newberry .....	21	.....	Rutland .....	1	.....
Port Huron .....	T.	14.0	<i>Washington</i>		
Sault Ste. Marie .....	20	16.5	Cascade Tunnel .....	85	.....
<i>Minnesota</i>			Spokane .....	3	.....
Campbell .....	8	.....	<i>Wisconsin</i>		
Collegeville .....	8	.....	Fond du Lac .....	3	.....
Duluth .....	20	26.5	Green Bay .....	3	17.0
Fort Ripley .....	9	.....	La Crosse .....	T.	20.0
Leech Lake Dam .....	25	.....	Park Falls .....	20	.....
Moorhead .....	9	28.5	Rhineland .....	21	.....
St. Paul .....	2	*	Wausau .....	7	16.0
Thief River Falls .....	27	.....	<i>Wyoming</i>		
<i>Montana</i>			Barnum .....	3	.....
Bozeman .....	4	.....	Casper .....	1	.....
Haugan .....	26	.....	Dome Lake .....	22	.....
Havre .....	2	.....	Evanston .....	4	.....
Missoula .....	2	.....	Yellowstone Park .....	7	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., February 7, 1927



NOTE.—This bulletin is issued on Tuesday's during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations. Shaded portions represent areas covered with snow; lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations. As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CHARLES F. MARVIN, Chief

No. 10

WASHINGTON, D. C., FEBRUARY 15, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The week just closed brought frequent and important changes in temperature over the more northern districts from the Rocky Mountains eastward, with subzero temperatures as far south as western Kansas and thence northeast to the upper Lakes and New England. Freezing temperatures did not reach the South Atlantic and east Gulf States, but did extend into central Texas, southern New Mexico, and into all except the lower elevations of Arizona; also locally in California.

The week as a whole continued mild, like that preceding, over much of the country from the Mississippi Valley eastward, but from the Great Plains westward the week was mainly cold.

Precipitation was light and infrequent during the early part of the week in all portions, but the last few days brought some unusually heavy rains in the Gulf States and lighter falls to the northward, and moderate to heavy rains occurred over much of California and in portions of near-by States, the rain changing to snow in the mountain districts.

Snow to a greater or less extent occurred from the mountains of southern and central California eastward to Colorado and New Mexico, the amounts being generally heavy at the higher elevations, and snow was rather general over northern districts from the Great Plains eastward to New England. In portions of Nebraska and near-by areas and thence eastward over Iowa and the southern portions of Minnesota and Wisconsin to Michigan there was moderate to heavy snow, and snow of importance occurred over much of the upper Lake region and from Pennsylvania and New York to New England.

## DEPTH OF SNOW ON GROUND

Despite considerable melting of the snow that fell during the latter part of the week, important increases in the depth of the cover as compared with last week appear from the Great Lakes eastward to New England. A considerable portion of eastern Nebraska and near-by areas, bare last week, now have a covering ranging from 3 to 12 inches, and the increases in portions of Minnesota and Wisconsin range up to 6 inches or more, and in New York and southern New England similar increases are noted.

Over the central Rocky Mountains there were local heavy falls in Colorado and northern New Mexico, with increases over the depths reported a week ago ranging up to 2 feet or more, and sharp increases occurred over much of Arizona, Utah, Nevada, and some of the mountains of California where the water outlook has greatly improved.

No important increases occurred in the northern Rocky Mountains and thence westward to Washington and Oregon, but here the depths in the high mountains are mainly above normal, notably in Idaho and thence westward where the depths now range up to 10 feet or more at some of the higher elevations.

The snow-covered area at the close of the week was materially greater than shown last week, the principal increases occurring over the Southwest, Missouri Valley, and Great Plains.

## ICE IN RIVERS AND HARBORS

No important changes occurred in the ice conditions on the rivers and lakes as compared with the preceding week, some increases in thickness occurring over the more northern districts and slight decreases to the southward where ice was reported a week ago.

The harbors of the Great Lakes are mostly still closed, except those on the southern shore of Lake Erie, which are either open or contain only floating ice.

The ice harvest is practically closed and a satisfactory crop has generally been secured.

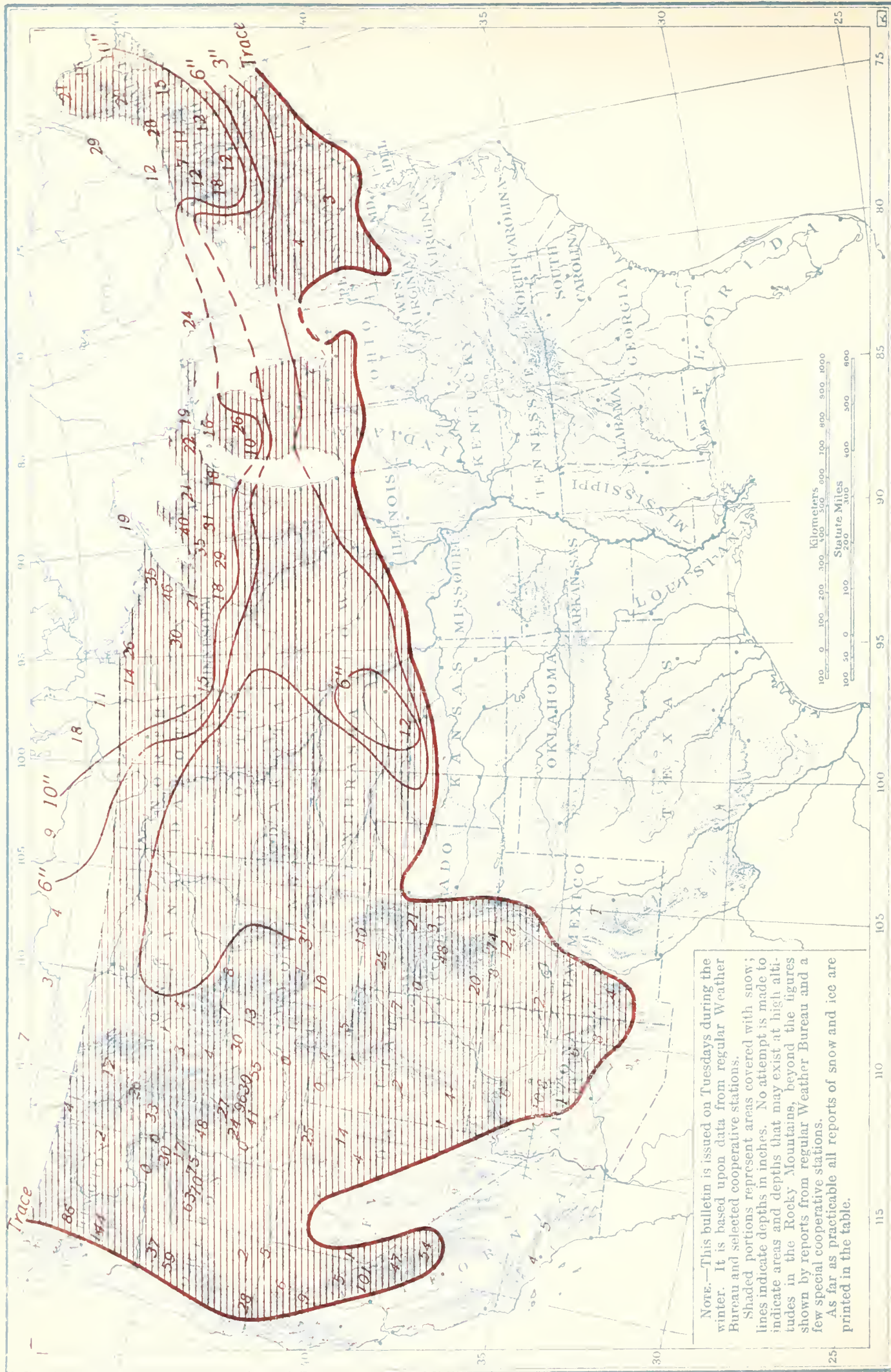
P. C. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., FEBRUARY 14, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Arizona</i>	<i>Inches</i>	<i>Inches</i>	<i>Nevada</i>	<i>Inches</i>	<i>Inches</i>
Flagstaff .....	8		Hylton .....	4	
Fort Apache .....	8		North Fork .....	9	
Williams .....	10		Reno .....	1	
<i>California</i>			<i>New Hampshire</i>		
Huntington Lake ....	54		Concord .....	10	17.0
McCloud .....	6		Keene .....	12	
Mount Wilson .....	4		Pittsburg .....	28	
<i>Colorado</i>			<i>New Mexico</i>		
Cumbres .....	74		Fort Bayard .....	4	
Dillon .....	21		Gamero .....	2	
Durango .....	8		Tres Piedras .....	8	
Steamboat Springs ...	25		<i>New York</i>		
<i>Idaho</i>			Albany .....	6	5.0
Hailey .....	21		Alfred .....	2	
McCall .....	48		Beaver River .....	18	
Pierce City .....	33		Canton .....	6	
Soldier Creek .....	39		Ithaca .....	1	
Spencer .....	30		Lake Placid .....	12	
<i>Iowa</i>			Lowville .....	10	
Albia .....	5		Rochester .....	3	0.0
Atlantic .....	5		Rome .....	9	
Davenport .....	2	†	Syracuse .....	4	
Dubuque .....	3	9.0	<i>North Dakota</i>		
Iowa City .....	5		Bismarck .....	1	25.0
Pocahontas .....	4		Williston .....	4	27.5
Sioux City .....	4	13.0	<i>Ohio</i>		
<i>Kansas</i>			Tiffin .....	1	
Dresden .....	3		Wauseon .....	1	
Smith Center .....	3		<i>Oregon</i>		
<i>Maine</i>			Fish Lake .....	28	
Eastport .....	8	0.0	Harrison Mine .....	63	
Greenville .....	29	13.0	Imperial Mine .....	70	
Houlton .....	16		Sled Springs .....	30	
Van Buren .....	21		Wallowa .....	17	
<i>Massachusetts</i>			<i>Pennsylvania</i>		
Amherst .....	4		Allentown .....	1	
Boston .....	5	0.0	Emporium .....	2	
<i>Michigan</i>			Harrisburg .....	1	*
Battle Creek .....	2		Scranton .....	1	
Detroit .....	2	7.5	Towanda .....	3	
Escanaba .....	18	23.0	Wellsboro .....	4	
Grand Rapids .....	2		<i>Utah</i>		
Ironwood .....	35		Cedar City .....	4	
Lansing .....	3		Ogden .....	2	
Marquette .....	21	5.0	Salt Lake City .....	4	
Saginaw .....	3		Watson .....	7	
Sault Ste. Marie ....	19	16.5	<i>Vermont</i>		
<i>Minnesota</i>			Brattleboro .....	6	15.0
Duluth .....	21	25.5	Burlington .....	7	10.0
Ely .....	35		Northfield .....	13	
Grand Meadow .....	5		St. Johnsbury .....	11	
Minneapolis .....	2		<i>Washington</i>		
Moorhead .....	11	30.0	Cascade Tunnel .....	86	
Mora .....	8		Paradise Inn .....	144	
Roseau .....	14		Spokane .....	2	
Virginia .....	46		<i>Wisconsin</i>		
Worthington .....	4		Eau Claire .....	4	
<i>Montana</i>			Fond du Lac .....	2	
Dillon .....	4		La Crosse .....	2	18.0
Haugan .....	26		Madison .....	1	
Kalispell .....	12		Medford .....	11	
Miles City .....	1		Milwaukee .....	6	
Red Lodge .....	8		Spooner .....	18	
<i>Nebraska</i>			<i>Wyoming</i>		
Auburn .....	4		Alta .....	13	
Columbus .....	7		Cheyenne .....	1	
Imperial .....	1		Evanston .....	5	
Lincoln .....	6		Newcastle .....	1	
Omaha .....	6	8.5	Sheridan .....	2	
Tekamah .....	6		South Pass City .....	16	

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., February 14, 1927



Note.—This bulletin is issued on Tuesdays during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations.

Shaded portions represent areas covered with snow; lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations.

As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 11

WASHINGTON, D. C., FEBRUARY 24, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The week ended Monday, February 21, had marked changes in temperature, a cold wave of considerable proportions overspreading the northwestern districts by Thursday morning and moving rapidly southward, carrying frosts and freezing temperatures well into southern Texas. This cold area moved quickly eastward over northern districts, but lost much of its severity to the southward and caused little damage in trucking regions east of Texas. This cold wave was soon followed by rising temperature and the latter part of the week was mainly rather warm.

The week, as a whole, continued warmer than normal, as has been the case for some weeks over the eastern half of the country, and there was a sharp return to warmer over the western half where the preceding week had been colder than normal. In general, all parts of the country had average temperatures well above normal save for small areas in Texas and New England.

The week brought a continuation of heavy precipitation in the far West, notably in California where rain was frequent and locally excessive at the lower elevations, and heavy snow occurred in some of the mountains.

In eastern districts, precipitation continued heavy in the middle Gulf States and portions of the southern Ohio drainage, and good rains occurred in Florida. Over central and eastern districts the bulk of the precipitation occurred during the latter half of the week, beginning about Friday in the southern Plains and extending Saturday and Sunday into the more eastern districts, continuing into Monday over the northeastern sections. There were heavy rains in the lower Mississippi Valley and along the Atlantic coast from the Virginias northeastward, the rain changing in the latter sections to heavy sleet or snow.

The precipitation in the far West was well distributed over the week.

## DEPTH OF SNOW ON GROUND

Increases in snow depths were uniformly large from eastern Ohio and northern West Virginia eastward and northeastward, the depths over much of Pennsylvania and adjoining areas now ranging from 10 to 20 inches. Over much of New York and New England the increases during the week were less, though reaching as much as 12 inches in portions of Maine.

From the upper Lakes westward there was a rather uniform decrease in the depths reported a week ago, ranging from 2 to 5 inches or more in northern Michigan and thence southwestward to eastern Nebraska. There was a general decrease of several inches over the Northern States from Lake Superior to the eastern slopes of the Rockies, and like conditions existed in the near-by Canadian Provinces.

In the high mountains of southern Idaho and generally in the mountains of the Pacific States and in portions of Nevada, Colorado, and near-by areas there were usually good increases in depth of snow, ranging up to 2 and 3 feet in the higher elevations of Washington, Oregon, Idaho, Colorado, and northern New Mexico. In California, Nevada, and Arizona the increases were less, but good falls added materially to the depths already existing and improved the water outlook.

## ICE IN RIVERS AND HARBORS

No important changes occurred in the ice conditions, though there were slight increases in a number of the harbors of the Great Lakes and on the rivers of New England. Over the upper portions of the Missouri and Mississippi Rivers and their tributaries the ice is decreasing slowly and apparently passing out without gorging or flooding.

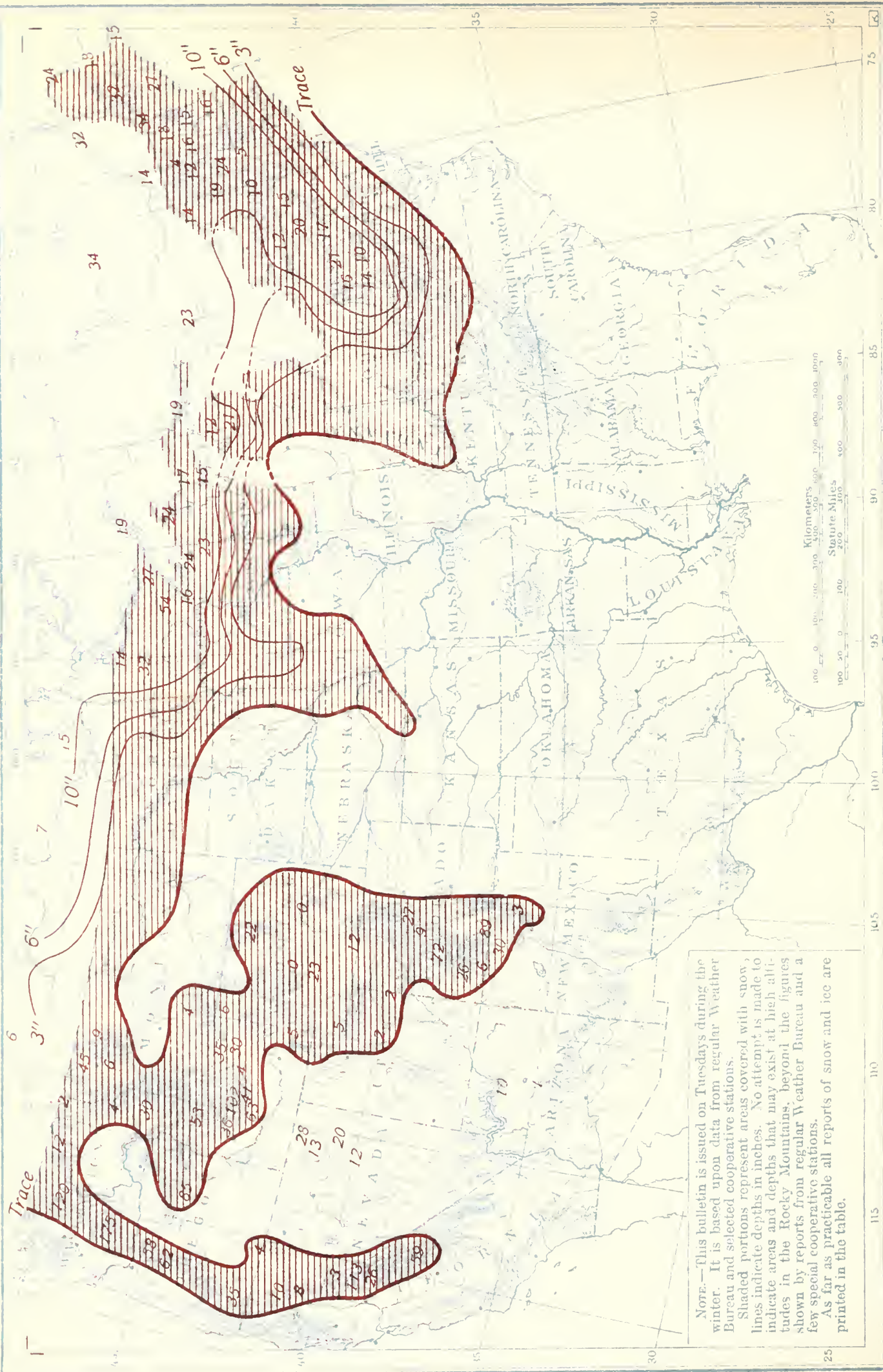
P. C. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., FEBRUARY 21, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>California</i>	<i>Inches</i>	<i>Inches</i>	<i>New York</i>	<i>Inches</i>	<i>Inches</i>
McCloud .....	10	.....	Binghamton .....	9	.....
Norden .....	113	.....	Buffalo .....	7	5.0
<i>Colorado</i>			Herkimer .....	12	.....
Crested Butte .....	72	.....	Lake Placid .....	12	.....
Durango .....	6	.....	Malone .....	16	.....
Leadville .....	9	.....	New York .....	3	0.0
Rico .....	26	.....	Ogdensburg .....	14	.....
<i>Idaho</i>			Oswego .....	11	11.0
Idaho City .....	36	.....	Saratoga Springs .....	14	.....
Ketchum .....	41	.....	Warwick .....	13	.....
Porthill .....	2	.....	<i>North Dakota</i>		
Vienna Mine .....	102	.....	Devils Lake .....	2	.....
<i>Indiana</i>			Williston .....	2	28.0
Columbus .....	4	.....	<i>Ohio</i>		
Shoals .....	2	.....	Beverly .....	9	.....
<i>Iowa</i>			Hiram .....	6	.....
Des Moines .....	T.	†	Zanesville .....	9	.....
Estherville .....	4	.....	<i>Oregon</i>		
<i>Maine</i>			Government Camp .....	58	.....
Gardiner .....	27	20.0	Harrison Mine .....	85	.....
Greenville .....	32	32.0	Siskiyou .....	6	.....
Millinocket .....	30	.....	<i>Pennsylvania</i>		
Oldtown .....	16	.....	Beaver Falls .....	11	.....
Portland .....	15	0.0	Confluence .....	10	.....
<i>Maryland</i>			Erie .....	4	4.0
Baltimore .....	2	0.0	Gettysburg .....	6	.....
Frederick .....	2	.....	Holtwood .....	2	.....
Oakland .....	6	.....	Johnstown .....	21	.....
<i>Massachusetts</i>			Millintown .....	22	.....
Concord .....	18	.....	Parkers Landing .....	12	.....
Holyoke .....	10	13.0	Philadelphia .....	2	0.0
Williamstown .....	4	.....	Pittsburgh .....	16	0.0
<i>Michigan</i>			Reading .....	5	0.0
Alpena .....	5	22.0	Warren .....	10	.....
Cadillac .....	8	.....	Williamsport .....	16	.....
Grayling .....	21	.....	<i>Rhode Island</i>		
Houghton .....	24	20.0	Kingston .....	3	.....
Port Huron .....	4	6.0	Providence .....	4	0.0
Sault Ste. Marie .....	19	18.0	<i>South Dakota</i>		
<i>Minnesota</i>			Huron .....	0	15.0
Collegeville .....	8	.....	Pierre .....	0	18.0
Duluth .....	16	26.5	<i>Vermont</i>		
Fort Ripley .....	11	.....	Brattleboro .....	14	15.0
Leech Lake Dam .....	33	.....	Burlington .....	4	11.0
Moorhead .....	9	30.5	<i>Virginia</i>		
St. Paul .....	2	*	Culpeper .....	3	.....
Thief River Falls .....	32	.....	Fredericksburg .....	1	.....
<i>Montana</i>			Woodstock .....	5	.....
Belton .....	45	.....	<i>Washington</i>		
Bozeman .....	4	.....	Cascade Tunnel .....	120	.....
Browning .....	9	.....	Laurier .....	12	.....
<i>Nebraska</i>			Paradise Inn .....	175	.....
Guide Rock .....	2	.....	<i>West Virginia</i>		
Omaha .....	T.	7.0	Charleston .....	2	.....
<i>Nevada</i>			Fairmont .....	12	.....
Arthur .....	20	.....	Parkersburg .....	4	0.0
Gold Creek .....	28	.....	Romney .....	12	.....
North Fork .....	13	.....	Rowlesburg .....	3	.....
<i>New Hampshire</i>			Williamson .....	3	.....
Berlin .....	13	.....	<i>Wisconsin</i>		
Concord .....	16	17.0	Ashland .....	24	.....
Durham .....	8	.....	Eau Claire .....	1	.....
Hanover .....	15	.....	Green Bay .....	2	15.0
<i>New Jersey</i>			Park Falls .....	23	.....
Lakewood .....	3	.....	Rhineland .....	14	.....
Trenton .....	2	0.0	Wausau .....	5	12.0
<i>New Mexico</i>			<i>Wyoming</i>		
Chama .....	30	.....	Dome Lake .....	22	.....
Tres Piedras .....	4	.....	Evanston .....	5	.....
Truchas .....	3	.....	Yellowstone Park .....	6	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., February 21, 1927



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 12

WASHINGTON, D. C., MARCH 2, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The closing week of February, like most others of the month, continued unusually warm for the season over much of the country and generally throughout the week. Few temperatures below zero were reported, and freezing weather did not extend into any important early fruit or trucking sections.

The average temperature for the week was above normal in practically all parts, and the excesses were large over all northern districts and in much of the Gulf and Plateau regions.

Precipitation was mainly light, except in the east Gulf and South Atlantic States on Thursday, over most districts from the Mississippi River eastward on Saturday and Sunday, and in the Great Plains, lower Mississippi Valley, and Gulf States on Monday, continuing Tuesday morning over much of the same territory, snow falling at that time over a considerable area from the lower Missouri Valley southeastward to the mountain regions of the Carolinas and Georgia.

For the week, as a whole, precipitation was light over most northern districts save in the far Northwest and from the lower Lakes northeastward to New England. It was light also over most of the middle portions and in the Southwest; likewise in central and southern Florida.

From northeastern Texas and the adjacent portions of Oklahoma eastward to the Atlantic coast the precipitation was more generous, and locally in southern Louisiana it was quite heavy.

Much clear weather prevailed during the week, particularly in the Atlantic and Gulf States, over the Great Plains, and in portions of the Southwest.

## DEPTH OF SNOW ON GROUND

Over the eastern slopes of the Rocky Mountains and in the Great Plains from Nebraska southward to Oklahoma and northern Texas and extending eastward into Arkansas and Missouri there was a material amount of snow during the week, mostly toward the end, and considerable areas in that region, bare a week ago, now have an appreciable cover, which is increasing at the present writing as well as extending to the eastward.

Over most of the other districts there was mainly little snow during the week, save in portions of the Northeast and in some of the far western mountains, and the depth of the snow cover decreased materially, the greatest decreases occurring in Pennsylvania and adjacent areas where the depths are now from 5 to 15 inches less than a week ago. Material reductions in depth, though probably without important run-off, occurred during the week in Minnesota and thence eastward to Michigan, and there were considerable reductions on the western slopes of the Rockies. In the more southern portions and at the lower elevations of most of the mountains of California and Nevada there was considerable melting and some loss from run-off, though in California the outlook for water continued good.

At a few points in the high mountains of Idaho, Oregon, and Washington there were increases in the snow depths and the stored snow ranges up to 15 feet or more in some favored sections.

The generally mild temperatures, with a material snow cover, over northern districts are favorable for a good run of sap in the maple sugar districts.

## ICE IN RIVERS AND HARBORS

There were material decreases in the ice thickness on most rivers where it still remained at the beginning of the week, but there were no important changes in the conditions on the Great Lakes, though unexpected increases of several inches were reported from the southern harbors of Lake Erie. The ice has practically disappeared from the Mississippi River.

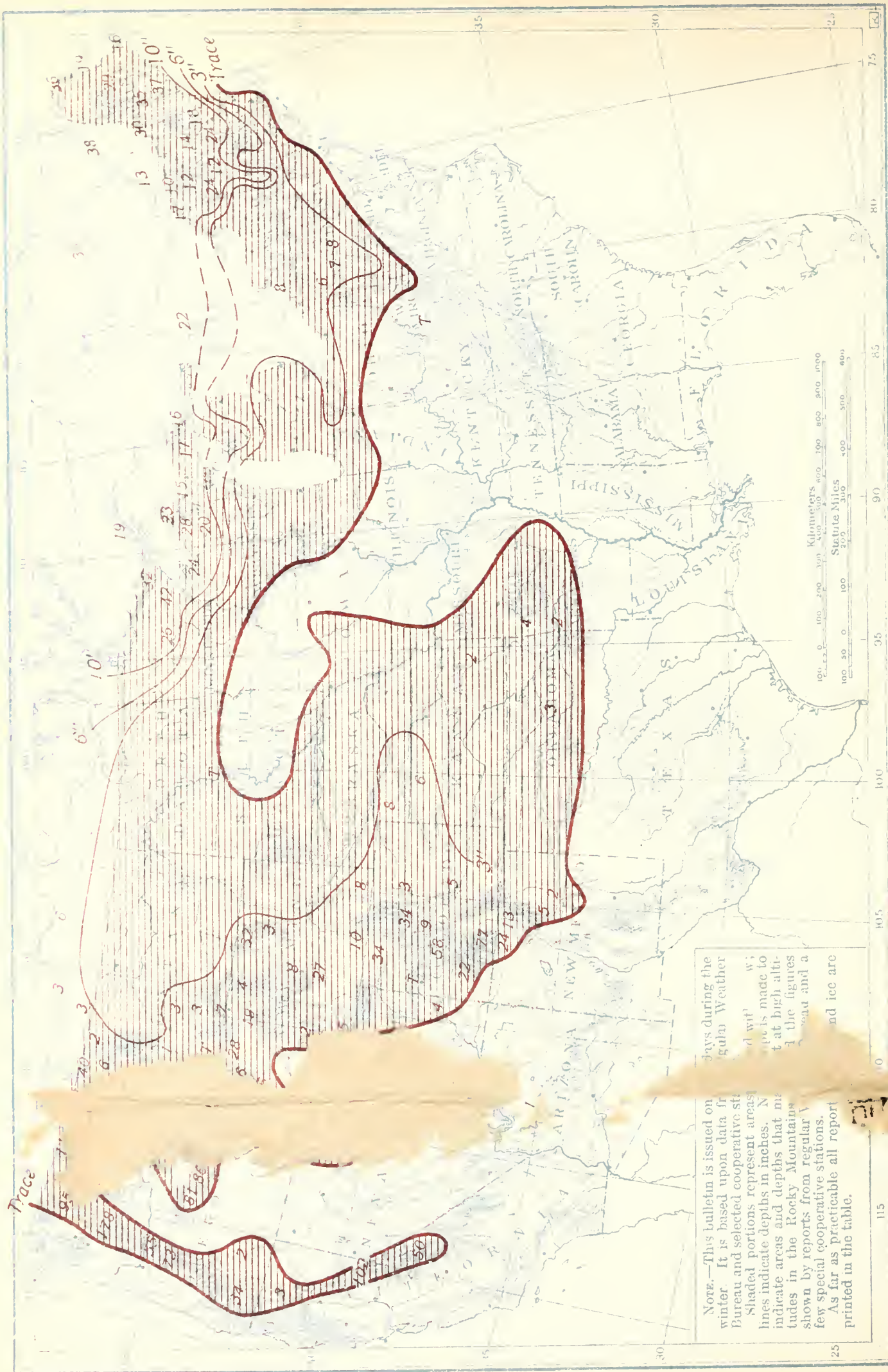
P. C. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., FEBRUARY 28, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Arkansas</i>	<i>Inches</i>	<i>Inches</i>	<i>New York</i>	<i>Inches</i>	<i>Inches</i>
Bentonville.....	4	.....	Albany.....	1	†
Fort Smith.....	2	0.0	Alfred.....	2	.....
Little Rock.....	T.	0.0	Beaver River.....	15	.....
<i>California</i>			Fredonia.....	8	.....
Huntington Lake....	50	.....	Herkimer.....	4	.....
Norden.....	102	.....	Lowville.....	15	.....
<i>Colorado</i>			Rochester.....	4	0.0
Cumbres.....	77	.....	Roxbury.....	10	.....
Dillon.....	34	.....	Saranac Lake.....	12	.....
Steamboat Springs...	34	.....	Syracuse.....	4	.....
<i>Idaho</i>			Watertown.....	3	.....
Hailey.....	26	.....	<i>North Dakota</i>		
Montpelier.....	2	.....	Bismarck.....	T.	23.0
Vienna Mine.....	120	.....	Williston.....	2	26.0
<i>Indiana</i>			<i>Ohio</i>		
Fort Wayne.....	1	.....	Ashland.....	1	.....
Notre Dame.....	2	.....	Cleveland.....	4	6.0
<i>Kansas</i>			Marion.....	2	.....
Dodge City.....	2	.....	Sandusky.....	2	2.5
Dresden.....	6	.....	Wauseon.....	3	.....
Iola.....	2	0.0	Zanesville.....	1	.....
Smith Center.....	3	.....	<i>Oklahoma</i>		
Wichita.....	1	.....	Oklahoma City.....	3	.....
<i>Maine</i>			<i>Oregon</i>		
Eastport.....	16	0.0	Baker Mine.....	96	.....
Greenville.....	32	33.0	Imperial Mine.....	86	.....
Houlton.....	19	.....	Lakeview.....	1	.....
Van Buren.....	26	.....	Sled Springs.....	36	.....
<i>Massachusetts</i>			Wallowa.....	2	.....
Concord.....	6	.....	<i>Pennsylvania</i>		
Holyoke.....	8	12.0	Emporium.....	3	.....
<i>Michigan</i>			Erie.....	4	.....
Alma.....	1	.....	Franklin.....	3	.....
Bloomington.....	2	.....	Freeland.....	3	.....
Detroit.....	T.	†	Huntingdon.....	8	.....
Escanaba.....	10	23.5	Pittsburgh.....	2	0.0
Humboldt.....	26	.....	Towanda.....	3	.....
Iron River.....	20	.....	<i>South Dakota</i>		
Mackinaw.....	12	.....	Huron.....	0	11.5
Marquette.....	15	7.0	Pierre.....	0	16.5
Newberry.....	17	.....	Rapid City.....	1	.....
Sault Ste. Marie.....	16	18.0	Yankton.....	T.	‡
<i>Minnesota</i>			<i>Utah</i>		
Ely.....	32	.....	Moab.....	4	.....
Leech Lake Dam.....	26	.....	<i>Vermont</i>		
Moorhead.....	1	29.0	Brattleboro.....	9	17.0
St. Paul.....	T.	†	Northfield.....	14	.....
<i>Missouri</i>			St. Johnsbury.....	15	.....
Kansas City.....	T.	0.0	<i>Washington</i>		
Springfield.....	1	.....	Laurier.....	11	.....
<i>Montana</i>			Paradise Inn.....	178	.....
Haugan.....	33	.....	<i>West Virginia</i>		
Kalispell.....	6	.....	Bayard.....	5	.....
Loweth.....	3	.....	Elkins.....	2	0.0
<i>Nebraska</i>			Fairmont.....	1	.....
Imperial.....	8	.....	Rowlesburg.....	1	.....
North Platte.....	2	.....	<i>Wisconsin</i>		
Valentine.....	1	.....	Fond du Lac.....	1	.....
<i>Nevada</i>			Medford.....	2	.....
Gold Creek.....	22	.....	Park Falls.....	18	.....
Hylton.....	4	.....	Wausau.....	3	12.0
<i>New Hampshire</i>			<i>Wyoming</i>		
Berlin.....	17	.....	Alta.....	19	.....
Concord.....	18	16.0	Casper.....	2	.....
Keene.....	15	.....	Cheyenne.....	8	.....
Pittsburg.....	30	.....	Cody.....	4	.....
<i>New Mexico</i>			Lander.....	8	.....
Chama.....	24	.....	Newcastle.....	2	.....
Las Vegas.....	2	.....	South Pass City.....	27	.....
Pecos.....	5	.....	Yellowstone Park....	7	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. Indicates trace.

# Depth of Snow on Ground, 8 p. m., February 28, 1927



Note.—This bulletin is issued on days during the regular winter. It is based upon data from the Bureau and selected cooperative stations. Shaded portions represent areas where the depth of snow is 6 inches or more. Lines indicate depths in inches. Numbers indicate areas and depths that may be found in the Rocky Mountains shown by reports from regular stations. As far as practicable all reports are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 13

WASHINGTON, D. C., MARCH 9, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The most pronounced feature of the weather during the week was the heavy snowfall in the southern Appalachian Mountain region and to the eastward over the Carolinas and southern Virginia near the beginning. The storm causing this was central over the middle Gulf coast on the morning of the 1st, moving to the northeastward during the following 24 hours, and at 8 a. m. of the 2d was central over eastern North Carolina as a severe storm, attended by high winds along the middle Atlantic coast and by heavy snows for the season of the year. In portions of North Carolina the depths ranged from 5 to 25 inches, in many cases the heaviest ever experienced so late in spring.

Following the heavy snow, cold weather prevailed in the Southern States for several days, freezing temperatures reaching into south-central Texas and to the coast lines of Alabama, Georgia, and South Carolina, and into northern and central Florida. Considerable damage resulted to early fruits and truck in these districts.

The latter part of the week was generally moderately warm and mainly without important precipitation until near the end when rain was general, with some snow over northern districts, from the Mississippi Valley eastward and in the west Gulf States.

The week, as a whole, continued warmer than normal over all northern districts, save locally in the Northeast, and it was distinctly colder than normal in all southern districts from the Great Plains eastward to the Atlantic coast, the averages over the Southeastern States ranging from 6° to 9° below the normal. From the upper Lake region westward to the Rocky Mountains the average temperatures for the week ranged from 6° to 15° above the normal.

Precipitation was liberal over much of the country to eastward of the middle and lower Mississippi Valley, and in the west Gulf region, and it was heavy from Arkansas northeastward over the northern Gulf States and the southern drainage area of the Ohio River. Precipitation was moderately heavy in the coast districts of California and in the far Northwest.

From the upper Lakes westward to the Rocky Mountains and over much of the Great Plains and Plateau there was little rain or snow during the week.

## DEPTH OF SNOW ON GROUND

Over practically all parts of the United States and southern Canada there was a general reduction of the snow depth as compared with the preceding week. Over the Lake Superior region and portions of New York and New England the decrease in depth ranged up to 5 or even 10 inches, and similar decreases were noted in the mountain districts of the West.

A considerable body of snow over the middle Plains at the beginning of the week disappeared, the resulting water generally passing into the ground in a very satisfactory manner. Also the heavy snow early in the week over North Carolina and portions of near-by States has practically all melted.

## ICE IN RIVERS AND HARBORS

The ice conditions on the Great Lakes are set forth in the following report from the Detroit office:

Superior, Duluth harbor solid; lake field extends out 15 miles; extensive fields middle portion; lighter fields extreme east. Whitefish Bay and St. Marys River solid. Green Bay, ice averages 24 inches north end and 9 at south. Michigan has only few fields, except in north. Ice in Straits 16 inches and smooth. Huron, few fields over north; extensive fields south. St. Clair River solid; Lake St. Clair has much open water and Detroit River is open. Erie, ice fields moved to south shore, extending from Sandusky to Buffalo where ice is not heavy, but extends beyond vision. Ontario, no extensive fields. Compared with the conditions at this date last year, there is now less ice in all the Lakes.

P. C. DAY,

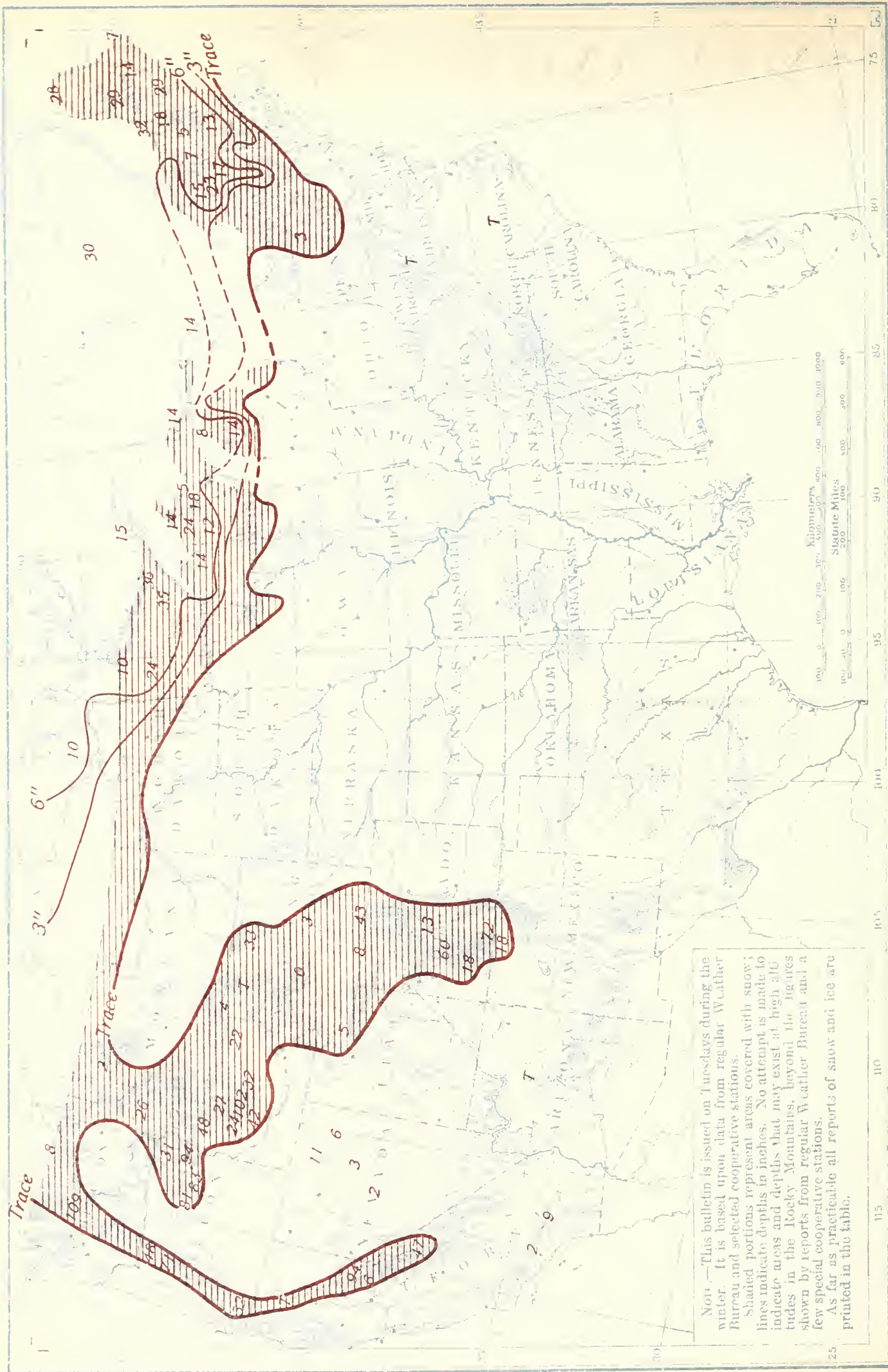
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 7, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Alaska</i>	<i>Inches</i>	<i>Inches</i>	<i>New Hampshire</i>	<i>Inches</i>	<i>Inches</i>
Bethel .....	T.	.....	Berlin .....	18	.....
Juneau .....	2	.....	Keene .....	13	.....
<i>California</i>			Pittsburg .....	32	.....
Blue Canyon .....	6	.....	<i>New Mexico</i>		
Huntington Lake .....	47	.....	Chama .....	18	.....
McCloud .....	T.	.....	Tres Piedras .....	T.	.....
Mount Wilson .....	2	.....	<i>New York</i>		
Norden .....	94	.....	Albany .....	T.	*
Squirrel Inn .....	9	.....	Beaver River .....	15	.....
<i>Colorado</i>			Binghamton .....	T.	.....
Crested Butte .....	60	.....	Buffalo .....	0	7.0
Cumbres .....	72	.....	Canton .....	3	.....
Leadville .....	13	.....	Corinth .....	17	.....
Rico .....	18	.....	Herkimer .....	1	.....
<i>Idaho</i>			Lowville .....	10	.....
Hailey .....	25	.....	Malone .....	3	.....
Idaho City .....	24	.....	Norwich .....	2	.....
Ketchum .....	32	.....	Old Forge .....	23	.....
Kirkham .....	27	.....	Oswego .....	T.	0.0
McCall .....	48	.....	Plattsburg .....	2	.....
Pierce City .....	26	.....	Poughkeepsie .....	1	.....
Soldier Creek .....	43	.....	Rome .....	1	.....
Spencer .....	22	.....	Roxbury .....	7	.....
Vienna Mine .....	102	.....	Saratoga Springs .....	6	.....
<i>Maine</i>			<i>North Carolina</i>		
Eastport .....	7	0.0	Raleigh .....	T.	.....
Farmington .....	30	.....	<i>North Dakota</i>		
Gardiner .....	29	18.0	Bismarck .....	0	22.0
Greenville .....	29	33.0	Williston .....	1	?
Oldtown .....	14	.....	<i>Ohio</i>		
Portland .....	10	0.0	Cleveland .....	0	2.0
Van Buren .....	28	.....	Sandusky .....	0	4.0
<i>Massachusetts</i>			<i>Oregon</i>		
Holyoke .....	4	12.0	Baker Mine .....	94	.....
Williamstown .....	1	.....	Bull Run Lake .....	71	.....
<i>Michigan</i>			Government Camp .....	48	.....
Alpena .....	2	*	Imperial Mine .....	83	.....
Benzonia .....	6	.....	Sled Springs .....	31	.....
Escanaba .....	4	23.5	<i>Pennsylvania</i>		
Ewen .....	24	.....	Emporium .....	T.	.....
Grayling .....	14	.....	Erie .....	0	6.0
Houghton .....	14	17.5	Mifflintown .....	2	.....
Humboldt .....	18	.....	Reading .....	T.	0.0
Iron Mountain .....	4	.....	State College .....	2	.....
Iron River .....	6	.....	Towanda .....	1	.....
Mackinaw .....	8	.....	Wellsboro .....	3	.....
Marquette .....	5	7.0	<i>Vermont</i>		
Newberry .....	13	.....	Brattleboro .....	6	16.0
Port Huron .....	T.	*	Burlington .....	T.	11.0
Sault Ste. Marie .....	14	20.0	Northfield .....	7	.....
<i>Minnesota</i>			St. Johnsbury .....	13	.....
Collegeville .....	T.	.....	White River Junction .....	10	.....
Duluth .....	3	27.0	<i>Washington</i>		
Ely .....	36	.....	Cascade Tunnel .....	109	.....
Leech Lake Dam .....	22	.....	Laurier .....	8	.....
Minneapolis .....	T.	.....	<i>Wisconsin</i>		
Moorhead .....	T.	28.0	Fond du Lac .....	T.	.....
Roseau .....	10	.....	Green Bay .....	T.	8.5
St. Paul .....	T.	*	Park Falls .....	14	.....
Thief River Falls .....	24	.....	Rhineland .....	12	.....
Virginia .....	35	.....	Spooner .....	8	.....
<i>Montana</i>			Wausau .....	2	10.0
Browning .....	T.	.....	<i>Wyoming</i>		
Havre .....	T.	.....	Casper .....	3	.....
Kalispell .....	2	.....	Cheyenne .....	T.	.....
<i>Nevada</i>			Dixon .....	8	.....
Arthur .....	6	.....	Dome Lake .....	33	.....
Austin .....	2	.....	Evanston .....	5	.....
Hylton .....	3	.....	Foxpark .....	43	.....
North Fork .....	11	.....	Yellowstone Park .....	4	.....

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

Depth of Snow on Ground, 8 p. m., March 7, 1927



**NOTE.**—This bulletin is issued on Tuesdays during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations.

Shaded portions represent areas covered with snow; lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations.

As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 14

WASHINGTON, D. C., MARCH 16, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

Warm and moderately wet weather prevailed over much of the country during the week just closed. Rain or snow prevailed to some extent in the Southwest and in portions of the Great Plains early in the week, and again about Thursday and Friday when widespread snow occurred in the southern Rocky Mountains, extending into the middle and northern Great Plains where locally some heavy falls occurred. The storm giving this snow was central over the Texas Panhandle on Friday morning, and during the following 48 hours moved slowly toward the Great Lakes, attended by widespread precipitation, mostly rain, to eastward of the Great Plains, the falls becoming heavy in portions of the Ohio and middle Mississippi Valleys and Gulf States and generally lighter to eastward and northward. At the close precipitation had overspread the Pacific Coast States and local snows had extended eastward into the northern Rocky Mountain region.

The week, as a whole, was again warmer than normal over nearly all regions from the Rocky Mountains eastward, the excess ranging from 10° to 18° over a large area from central Montana eastward and southeastward to the Atlantic Coast. West of the Rocky Mountains and over the West Gulf States the weekly mean temperatures were chiefly slightly below the normal. Freezing temperatures did not extend into the southern districts and no material damage from frost occurred.

Precipitation was mainly well distributed, and the heavy snows during the early days of the week furnished much moisture, in a very satisfactory manner, to the winter wheat districts of the Great Plains. The weekly amounts of rainfall were heavy to excessive in portions of the lower Mississippi Valley and middle Gulf States, and the falls were generous over most other districts from the Great Plains eastward, save in Florida and portions of the northeast. Only slight precipitation occurred over much of Texas and to the westward, but moderate falls occurred in California and to the northward.

## DEPTH OF SNOW ON GROUND

Due to the unusual warmth over central and eastern districts, there was rapid melting of the snow, and the depths over the more northern districts, where a substantial cover remained at the close of the preceding week, were reduced from 5 to 10 inches or more, and only small areas in the Lake Superior region, northern New York, and interior and northern New England still have a material cover. The considerable amount of snow that fell early in the week over portions of the Great Plains has mostly disappeared, though some still remains in central Nebraska. In the western mountains there were mainly increases in the depths at the higher elevations, this being particularly the case locally in California and the high elevations of Oregon.

## ICE IN RIVERS AND HARBORS

The ice has largely disappeared from the principal rivers save in the more northerly portions. The ice conditions on the Great Lakes are set forth in the following report from the Detroit office:

Superior, ice field extends 15 miles from Duluth; open water beyond; broken fields to west of Keweenaw; open water to north; less ice over eastern portion. St. Marys River, ice decreasing. Green Bay, ice decreasing north; open water south. Michigan, no fields except from Charlevoix north to Straits where 16-inch ice prevails. Huron, fields confined to east shore; broken fields west shore. St. Clair River open. Lake St. Clair opening rapidly. Erie, west portion clear with broken fields moving with wind east to Dunkirk; extensive fields at Buffalo. Ontario, fields confined to extreme east portion. Less ice in all the Lakes and not so heavy as usual at this time.

P. C. DAY,

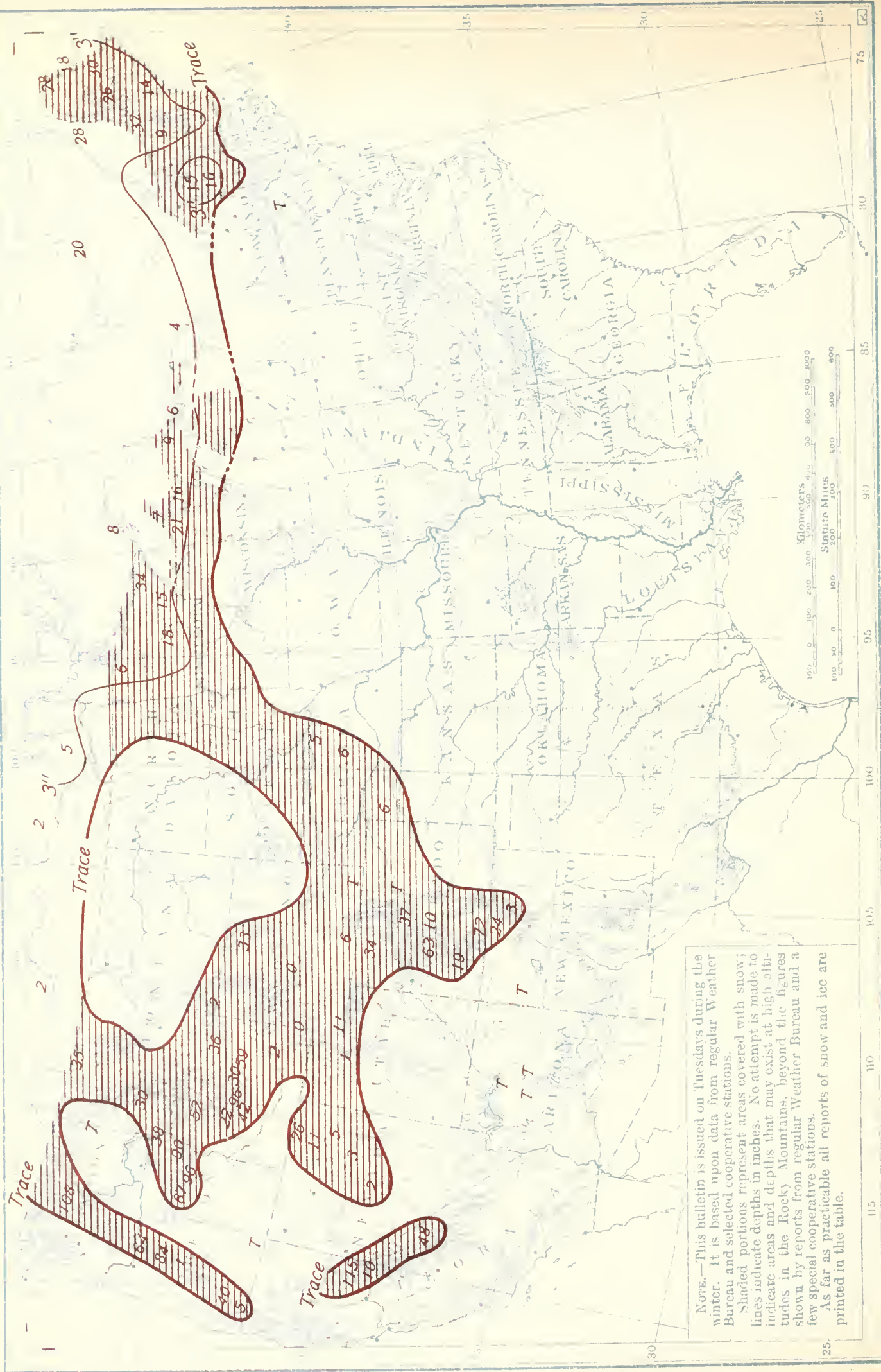
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 14, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Arizona</i>	<i>Inches</i>	<i>Inches</i>	<i>Nevada</i>	<i>Inches</i>	<i>Inches</i>
Flagstaff .....	T.		Arthur .....	5	
Grand Canyon .....	T.		Austin .....	2	
Williams .....	T.		Gold Creek .....	26	
<i>California</i>			Hylton .....	3	
Blue Canyon .....	10		North Fork .....	11	
Huntington Lake .....	46		<i>New Hampshire</i>		
Norden .....	115		Berlin .....	5	
<i>Colorado</i>			Concord .....	T.	8.0
Crested Butte .....	63		Hanover .....	6	
Cumbres .....	72		Keene .....	4	
Denver .....	T.		Pittsburg .....	32	
Dillon .....	37		<i>New Mexico</i>		
Leadville .....	10		Chama .....	24	
Rico .....	19		Gamero .....	T.	
Steamboat Springs .....	34		Tres Piedras .....	4	
<i>Idaho</i>			Truchas .....	3	
Hailey .....	20		<i>New York</i>		
Idaho City .....	22		Beaver River .....	15	
Ketchum .....	30		Buffalo .....	0	7.0
McCall .....	52		Canton .....	T.	
Mascot Mine .....	59		Corinth .....	4	
Pierce City .....	30		Old Forge .....	16	
Pocatello .....	2		Roxbury .....	T.	
Shake Creek .....	42		<i>North Dakota</i>		
Soldier Creek .....	37		Bismarck .....	0	18.0
Vienna Mine .....	96		Devils Lake .....	T.	
<i>Maine</i>			Williston .....	0	‡
Eastport .....	T.	0.0	<i>Oregon</i>		
Gardiner .....	14	12.0	Baker Mine .....	90	
Greenville .....	26	32.0	Bull Run Lake .....	84	
Houlton .....	18		Detroit .....	1	
Millinocket .....	30		Fish Lake .....	40	
Oldtown .....	6		Government Camp .....	64	
Portland .....	1	0.0	Harrison Mine .....	87	
Van Buren .....	28		Imperial Mine .....	96	
<i>Michigan</i>			Lakeview .....	T.	
Alpena .....	T.	*	Siskiyou .....	5	
Detroit .....	0	†	Sled Springs .....	38	
Escanaba .....	T.	21.0	Welches .....	2	
Ewen .....	21		<i>South Dakota</i>		
Grayling .....	3		Huron .....	T.	0.0
Houghton .....	7	10.0	Pierre .....	T.	†
Humboldt .....	16		<i>Utah</i>		
Iron River .....	1		Logan .....	T.	
Mackinaw .....	3		Ogden .....	T.	
Marquette .....	T.	5.0	Salt Lake City .....	1	
Newberry .....	9		<i>Vermont</i>		
Sault Ste. Marie .....	6	17.5	Bellows Falls .....	T.	
<i>Minnesota</i>			Brattleboro .....	0	*
Collegeville .....	2		Burlington .....	0	‡
Duluth .....	1	22.0	Northfield .....	1	
Ely .....	34		St. Johnsbury .....	9	
Leech Lake Dam .....	18		White River Junction .....	1	
Montevideo .....	2		<i>Washington</i>		
Moorhead .....	T.	*	Cascade Tunnel .....	108	
Mora .....	T.		Laurier .....	6	
Roseau .....	6		Spokane .....	T.	
Virginia .....	15		<i>Wisconsin</i>		
<i>Montana</i>			Medford .....	T.	
Belton .....	35		Rhineland .....	2	
Bozeman .....	T.		Spooner .....	T.	
Brenner .....	32		Wausau .....	0	†
Kalispell .....	T.		<i>Wyoming</i>		
<i>Nebraska</i>			Casper .....	T.	
Alliance .....	T.		Cheyenne .....	T.	
Broken Bow .....	6		Dixon .....	6	
Imperial .....	6		Dome Lake .....	33	
North Platte .....	T.		Evanston .....	11	
O'Neill .....	5		Yellowstone Park .....	2	
Valentine .....	T.		Yoder .....	T.	

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., March 14, 1927



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 15

WASHINGTON, D. C., MARCH 23, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The early part of the week was mainly cool with scattered local snows or rains in the western half of the country, while to the eastward it was mainly warm and dry. During the latter half it continued cool in the West, but precipitation overspread much of the country from the Rocky Mountains eastward, beginning about Saturday in the central Rocky Mountains and extending into the Great Plains and central valleys by Sunday and into the Atlantic Coast States during Monday. Heavy rains attended this storm over much of the Mississippi Valley and portions of adjoining sections, and material snow fell over a considerable area from Colorado and Wyoming eastward over Nebraska and portions of adjacent States to the Great Lakes.

For the week, as a whole, the temperature continued above normal over all districts from the eastern Plains to the Atlantic coast, and it was particularly warm for the period of the year in the more eastern districts, the weekly averages in this area ranging from 10° to 15° or more above normal.

From the western Plains to the Pacific coast the week was practically everywhere cold, the averages over much of the middle Rocky Mountain and Plateau region ranging from 8° to 13° below normal.

Temperatures reached the freezing point or lower as far south as central Texas at some time during the week, and from thence northeastward to the Ohio River, West Virginia, western Maryland, and over most of the States to the northeast. In the western half, freezing weather was experienced in all districts save the lower elevations from Texas westward and those of the Pacific Coast States.

Precipitation was generous to heavy over much of the Ohio and middle Mississippi Valleys, causing more or less flooding, and there were generous amounts in near-by areas of the upper Mississippi Valley, Great Lakes, and west Gulf States. There was considerable heavy, wet snow from Colorado and Wyoming northeastward to Lake Michigan, attended by local sleet and glaze.

In the Southeastern States, including Florida, there was mainly little precipitation, and similar conditions existed from the Great Plains westward, save in the far Northwest and where snow occurred in the vicinity of Colorado and Wyoming and to the eastward.

## DEPTH OF SNOW ON GROUND

Due to an important fall late in the week, a considerable area from Colorado and Wyoming eastward to Lake Michigan, partly bare a week ago, had an appreciable snow cover at the close, ranging from 2 to 6 inches or more, but melting rapidly. There were a few increases in the snow depths locally in northern New York and the adjacent portion of Vermont, but elsewhere from the Rocky Mountains eastward, where appreciable depths existed, there was rapid melting, and at the close no important amounts remained save in northern Maine. In the western mountain districts melting was general, though mostly moderate.

## ICE IN RIVERS AND HARBORS

The ice conditions on the Great Lakes are shown in the following report from the Detroit office:

Superior, small fields in extreme west; moving fields off Keweenaw Point; no fields Marquette east to Whitefish Point. Whitefish Bay, ice honeycombing. Much open water St. Marys River. Green Bay, ice softening north; broken central; open water south. Michigan, no fields, except from Charlevoix northward to Straits where open lanes and water showing. Huron, fields confined to east shore. St. Clair River and Lake St. Clair, open. Erie, fields confined to extreme east portion and breaking up. Ontario, free of ice and harbors open. St. Lawrence River, opening. Much less ice than usual in all lakes.

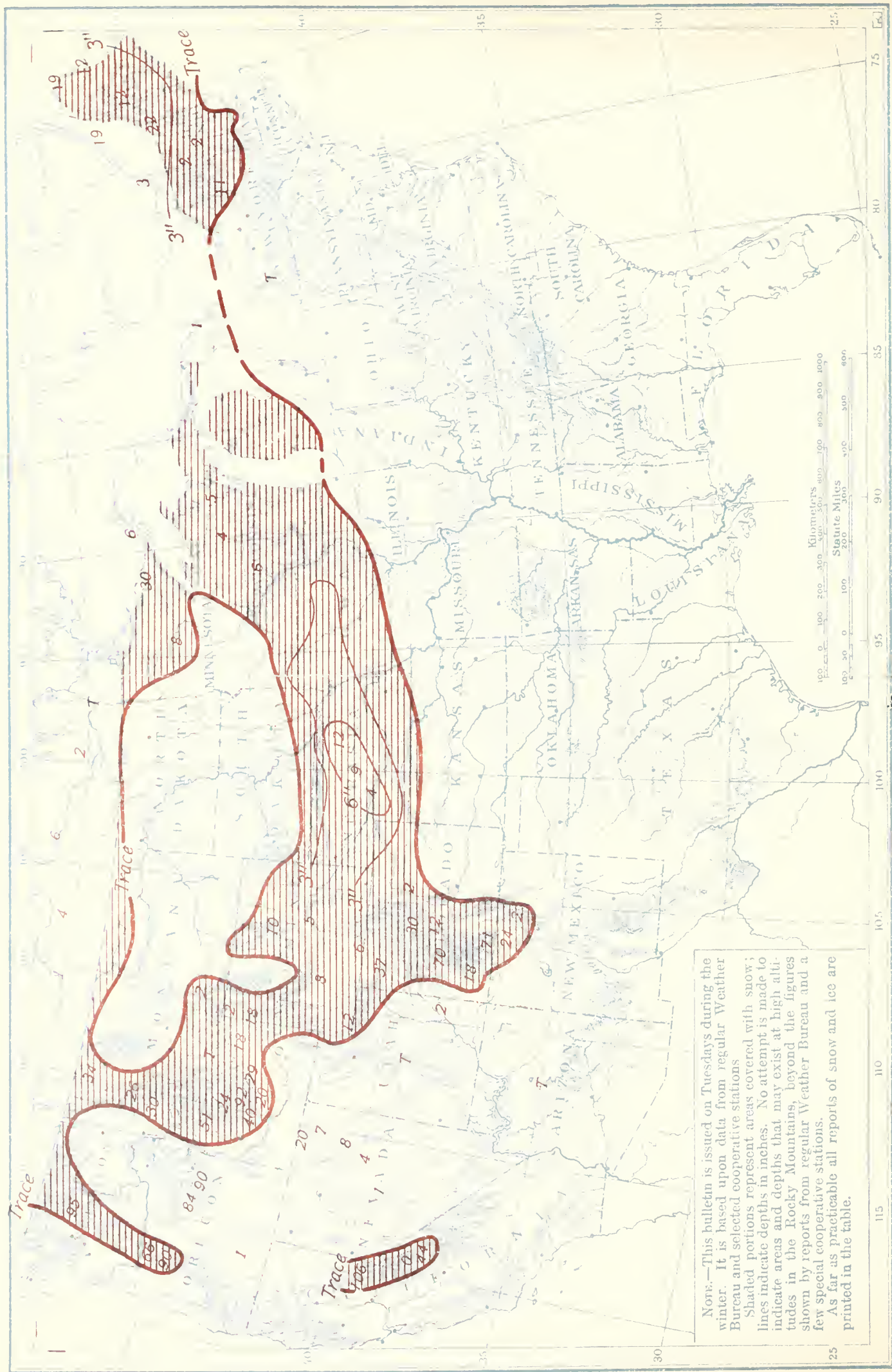
P. C. DAY,  
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 21, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Alaska</i>	<i>Inches</i>	<i>Inches</i>	<i>Nebraska</i>	<i>Inches</i>	<i>Inches</i>
Cordova .....	3	.....	Alliance .....	3	.....
Eagle .....	14	.....	Broken Bow .....	9	.....
Nome .....	14	.....	Columbus .....	2	.....
St. Paul Island .....	4	.....	Grand Island .....	3	.....
<i>California</i>			Guide Rock .....	2	.....
Huntington Lake .....	44	.....	Imperial .....	8	.....
Norden .....	106	.....	Norfolk .....	4	.....
<i>Colorado</i>			North Platte .....	4	.....
Crested Butte .....	70	.....	O'Neill .....	12	.....
Cumbres .....	71	.....	Tekamah .....	4	.....
Denver .....	2	.....	Valentine .....	2	.....
Dillon .....	30	.....	<i>Nevada</i>		
Leadville .....	12	.....	Arthur .....	8	.....
Rico .....	18	.....	Austin .....	1	.....
Steamboat Springs .....	37	.....	Gold Creek .....	20	.....
<i>Idaho</i>			Hylton .....	4	.....
Hailey .....	20	.....	North Fork .....	7	.....
Idaho City .....	18	.....	<i>New Hampshire</i>		
Ketchum .....	29	.....	Hanover .....	2	.....
Kirkham .....	24	.....	Pittsburg .....	22	.....
McCall .....	51	.....	Woodsville .....	1	.....
Mascot Mine .....	55	.....	<i>New Mexico</i>		
Pierce City .....	30	.....	Chama .....	24	.....
Shake Creek .....	40	.....	Tres Piedras .....	2	.....
Soldier Creek .....	36	.....	<i>New York</i>		
Spencer .....	18	.....	Beaver River .....	2	.....
Vienna Mine .....	92	.....	Buffalo .....	T.	6.0
<i>Illinois</i>			Canton .....	2	.....
Walnut .....	T.	.....	Malone .....	1	.....
Waukegan .....	T.	.....	Ogdensburg .....	1	.....
<i>Indiana</i>			Old Forge .....	11	.....
Fort Wayne .....	T.	.....	Saranac Lake .....	2	.....
<i>Iowa</i>			Saratoga Springs .....	2	.....
Atlantic .....	1	.....	<i>North Dakota</i>		
Carroll .....	2	.....	Bismarck .....	0	16.0
Charles City .....	2	.....	Williston .....	0	?
Des Moines .....	1	0.0	<i>Oregon</i>		
Dubuque .....	2	0.0	Bull Run Lake .....	90	.....
Iowa City .....	1	.....	Government Camp .....	66	.....
Marshalltown .....	5	.....	Harrison Mine .....	84	.....
Pocahontas .....	3	.....	Imperial Mine .....	90	.....
Sioux City .....	2	0.0	Silver Lake .....	1	.....
Waterloo .....	4	.....	<i>South Dakota</i>		
<i>Maine</i>			Yankton .....	3	†
Eastport .....	T.	0.0	<i>Utah</i>		
Gardiner .....	3	†	Moab .....	2	.....
Greenville .....	12	29.0	<i>Vermont</i>		
Houlton .....	12	.....	Burlington .....	2	?
Portland .....	1	0.0	Northfield .....	2	.....
Van Buren .....	19	.....	White River Junction .....	1	.....
<i>Michigan</i>			<i>Washington</i>		
Alma .....	1	.....	Cascade Tunnel .....	95	.....
Cadillac .....	1	.....	<i>Wisconsin</i>		
Escanaba .....	T.	18.0	Eau Claire .....	6	.....
Grand Rapids .....	T.	.....	Fond du Lac .....	2	.....
Grayling .....	1	.....	Green Bay .....	2	0.0
Iron Mountain .....	5	.....	Madison .....	2	.....
Lansing .....	T.	.....	Milwaukee .....	2	.....
Ludington .....	1	.....	Park Falls .....	2	.....
<i>Minnesota</i>			Rhineland .....	4	.....
Duluth .....	0	16.0	Wausau .....	2	0.0
Ely .....	30	.....	<i>Wyoming</i>		
Leech Lake Dam .....	8	.....	Alta .....	18	.....
Moorhead .....	0	*	Casper .....	5	.....
St. Paul .....	2	0.0	Cheyenne .....	2	.....
Worthington .....	8	.....	Dixon .....	6	.....
<i>Montana</i>			Evanston .....	12	.....
Belton .....	34	.....	South Pass City .....	8	.....
Big Timber .....	2	.....	Yellowstone Park .....	2	.....
Haugan .....	26	.....	Yoder .....	3	.....

\*Shore ice. †Floating ice. ‡Ice gorged. § Measurement impracticable.  
T. indicates trace.

# Depth of Snow on Ground, 8 p. m., March 21, 1927



# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 16

WASHINGTON, D. C., MARCH 30, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The early part of the week was mainly cool over the districts from the Rocky Mountains eastward, and freezing temperatures extended southward over the Great Plains to southern New Mexico, central Texas, and the northern portion of Arkansas, and again about the middle of the week rather low temperatures occurred over the South Atlantic and east Gulf States with light frosts as far south as Mobile, Ala., and Thomasville, Ga.

Generally speaking, freezing temperatures at some time during the week extended well into the northern portions of the Gulf States, into the western districts of the South Atlantic States, and into northern Texas and over most of New Mexico.

The week, as a whole, was distinctly cold from the Mississippi Valley eastward, the average temperature ranging from 5° to 8° below normal, while for the preceding week the averages in about the same area were 10° to 15° above normal. Over the western half of the country, temperatures were mainly near the normal, an excess of several degrees occurring over the far Southwest. The cooler weather, while causing injurious frosts in a few localities, was nevertheless mainly beneficial in retarding vegetation which had advanced unduly in many sections.

There was generally but little precipitation, particularly in the central valleys where heavy rains had fallen for several previous weeks. The lack of rain favored the subsidence of high waters in many sections of the Mississippi and Ohio Valleys, though the larger streams are still locally in flood.

Considerable precipitation occurred over the eastern sections at the beginning of the week, and the first few days brought mainly light rain or snow to portions of the Missouri and upper Mississippi Valleys, extending during Saturday and Sunday into the Great Lakes region, upper Ohio Valley, and the Northeastern States. Over the western mountain districts and thence to the Pacific there was mainly little rain or snow.

The general absence of precipitation over most of the country was mainly favorable in permitting the drying of the soil, which had been too wet for the satisfactory progress of farming operations over many sections.

## DEPTH OF SNOW ON GROUND

No important increases in the depth of the snow cover occurred save locally from North Dakota to the upper Lakes and at a few points in New York and New England, though snow occurred on several dates, and was comparatively heavy Friday from Minnesota to Michigan, most of it melting, however, before the close of the week. There were a few local increases in the snow depths in the western mountains.

The considerable body of snow on the ground from eastern Colorado to central Iowa at the beginning of the week disappeared, and there were slight reductions in the depths still remaining in the upper Lake region and the northern portions of New York and New England. In the western mountains there were important reductions in the depth of the stored snow at the higher elevations, probably by settling, without much loss of water content.

## ICE IN RIVERS AND HARBORS

The ice conditions on the Great Lakes are shown in the following report from the Detroit office:

Superior, fields decreasing and moving with wind. Whitefish Bay, ice solid, but honeycombing. St. Marys River, more open water and ice softening. Green Bay, fields confined to extreme north end. Michigan, no fields, except from Charlevoix northward, and broken at Straits; much open water showing. Huron, fields confined to east shore. Erie, broken fields decreasing, with open water lanes at extreme east portion. Ontario, open, except at Kingston. St. Lawrence River, open.

P. O. DAY,

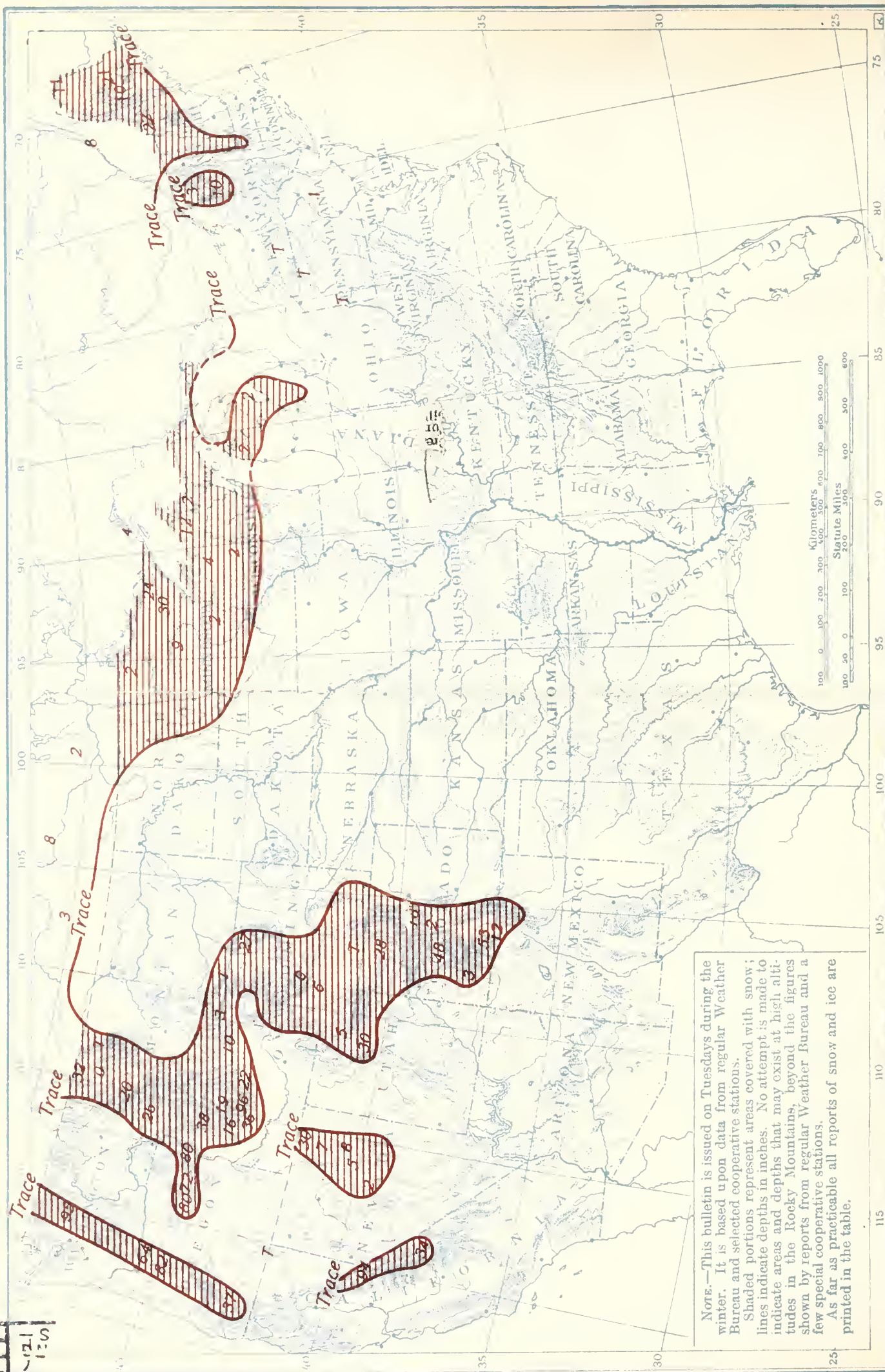
Meteorologist, in charge of Division.

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., MARCH 28, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>Alaska</i>	<i>Inches</i>	<i>Inches</i>	<i>Montana</i>	<i>Inches</i>	<i>Inches</i>
Bethel.....	3	.....	Belton.....	32	.....
Eagle.....	14	.....	Browning.....	T.	.....
Nome.....	10	.....	Haugan.....	20	.....
<i>California</i>			Red Lodge.....	1	.....
Huntington Lake....	34	.....	<i>Nevada</i>		
Norden.....	94	.....	Arthur.....	8	.....
<i>Colorado</i>			Austin.....	2	.....
Crested Butte.....	48	.....	Gold Creek.....	30	.....
Chabres.....	53	.....	Hylton.....	5	.....
Limon.....	18	.....	McGill.....	1	.....
Leadville.....	2	.....	North Fork.....	7	.....
Rico.....	3	.....	<i>New Hampshire</i>		
Steamboat Springs...	28	.....	Hanover.....	T.	.....
<i>Idaho</i>			Pittsburg.....	22	.....
Hailey.....	15	.....	<i>New Mexico</i>		
Idaho City.....	16	.....	Chama.....	12	.....
Ketchum.....	22	.....	<i>New York</i>		
Kirkham.....	19	.....	Alfred.....	T.	.....
McCall.....	38	.....	Beaver River.....	6	.....
Pierce City.....	26	.....	Buffalo.....	0	6.0
Shake Creek.....	36	.....	Canton.....	T.	.....
Soldier Creek.....	29	.....	Old Forge.....	10	.....
Spencer.....	10	.....	Saranac Lake.....	3	.....
Vienna Mine.....	96	.....	<i>North Dakota</i>		
<i>Maine</i>			Bismarck.....	0	†
Eastport.....	T.	0.0	Devils Lake.....	T.	.....
Gardiner.....	T.	0.0	Williston.....	0	‡
Greenville.....	10	30.0	<i>Oregon</i>		
Millinocket.....	21	.....	Baker Mine.....	80	.....
Van Buren.....	11	.....	Bull Run Lake.....	82	.....
<i>Massachusetts</i>			Fish Lake.....	37	.....
Williamstown.....	1	.....	Government Camp....	64	.....
<i>Michigan</i>			Harrison Mine.....	72	.....
Ann Arbor.....	T.	.....	Imperial Mine.....	80	.....
Bad Axe.....	2	.....	Lakeview.....	T.	.....
Benzonia.....	2	.....	<i>Pennsylvania</i>		
Cadillac.....	2	.....	Beaver Falls.....	T.	.....
East Tawas.....	2	.....	Freeland.....	1	.....
Escanaba.....	T.	16.0	Wellsboro.....	T.	.....
Ewen.....	12	.....	<i>Utah</i>		
Humboldt.....	2	.....	Park City.....	30	.....
Iron Mountain.....	1	.....	<i>Vermont</i>		
Iron River.....	T.	.....	Northfield.....	T.	.....
Marquette.....	T.	1.0	<i>Washington</i>		
Newberry.....	T.	.....	Cascade Tunnel.....	95	.....
Saginaw.....	T.	.....	<i>Wisconsin</i>		
Sault Ste. Marie....	T.	15.5	Eau Claire.....	T.	.....
<i>Minnesota</i>			Green Bay.....	T.	0.0
Campbell.....	8	.....	Medford.....	4	.....
Collegeville.....	7	.....	Park Falls.....	4	.....
Duluth.....	T.	15.0	Wausau.....	2	0.0
Ely.....	24	.....	<i>Wyoming</i>		
Fort Ripley.....	2	.....	Cheyenne.....	T.	.....
Leech Lake Dam....	9	.....	Dixon.....	T.	.....
Minneapolis.....	T.	.....	Dome Lake.....	27	.....
Moorhead.....	3	*	Evanston.....	5	.....
Mora.....	2	.....	South Pass City.....	6	.....
Roseau.....	2	.....	Yellowstone Park....	3	.....
St. Paul.....	T.	0.0	Yoder.....	T.	.....
Virginia.....	30	.....			

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

Depth of Snow on Ground, 8 p. m., March 28, 1927



NOTE.—This bulletin is issued on Tuesdays during the winter. It is based upon data from regular Weather Bureau and selected cooperative stations.

Shaded portions represent areas covered with snow; lines indicate depths in inches. No attempt is made to indicate areas and depths that may exist at high altitudes in the Rocky Mountains, beyond the figures shown by reports from regular Weather Bureau and a few special cooperative stations.

As far as practicable all reports of snow and ice are printed in the table.

# SNOW AND ICE BULLETIN

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU  
CHARLES F. MARVIN, Chief

No. 17

WASHINGTON, D. C., APRIL 6, 1927

WINTER 1926-27

## GENERAL SUMMARY OF THE WEATHER FOR THE WEEK

The week was without important temperature changes and was, on the whole, slightly warmer than normal over the interior valleys, and distinctly warmer over the southern Plains, Gulf States, and the southern Appalachian region. Over the Middle Atlantic States the week was moderately cool, and it was slightly cooler than normal over the Plateau and Pacific Coast States. No important frost damage was reported, and freezing temperatures did not occur over most central and southern districts. Moderately cool weather was beneficial in retarding somewhat the development of vegetation in advance of that normal for the season.

Precipitation was generous to heavy over most districts from the Great Plains eastward, though there was little in New England, along the immediate Gulf coast, including the Florida Peninsula, or in the western Plains and near-by portions of the Rocky Mountain region. Generous rains or snows occurred over much of California, and there were moderate falls over most other portions of the Plateau and Pacific coast regions. The most important precipitation of the week occurred with a storm that formed in the middle Plateau early in the week and, moving eastward, was central Thursday morning over Colorado. By Friday it had advanced to the middle Mississippi Valley and heavy rains had occurred over extensive areas in the lower Missouri, middle Mississippi, and Ohio Valleys, with more or less snow over the northern portions of the precipitation area. By Saturday it had moved to the Middle Atlantic States, but had diminished somewhat, though attended by considerable snow and some sleet in Pennsylvania, New York, and portions of near-by States.

## DEPTH OF SNOW ON GROUND

While snow fell over rather wide areas, notably from Iowa eastward to near the Atlantic coast and locally in New England, it soon melted and practically none of this remained on the ground at the close of the week save occasionally in Pennsylvania and New York.

In the western mountains there were some heavy falls, notably in the Black Hills region and locally in the high elevations of California and Oregon, and at a few points in the Rocky Mountains.

In the central portions of the Sierra Nevada there were local increases in depth during the week ranging up to nearly 5 feet at some of the higher points, and amounts up to 12 inches were added in some of the mountains of Oregon and Idaho.

The snow still on the ground at the beginning of the week in northern New England and the Lake Superior region had practically disappeared, so that only a few patches now remain in any district east of the Rocky Mountains. In portions of Colorado, Wyoming, Idaho, and Nevada there were important reductions in the stored snow depths, but in most Mountain States there still remain good amounts, over 15 feet in depth at a point in Washington and over 12 feet near Summit, Calif.

In practically all the western mountain districts where snow is an important source of water during the dry season, the ground is now usually well saturated and the snow conditions favorable for a good supply of water.

## ICE IN RIVERS AND HARBORS

The ice has practically disappeared from all streams with little damage from gorging or flooding. The Great Lakes are open for navigation and the ice conditions still existing are set forth in the following statement from the Detroit office:

Local navigation opened at Duluth. Few floating fields off Keweenaw Point. Whitefish Bay, ice decreasing and honeycombing. Tugs opening channel lower St. Marys River. Green Bay, ice confined to extreme

## SNOW DEPTH AND ICE THICKNESS, 8 P. M., APRIL 4, 1927

Stations	Snow	Ice in rivers, harbors, etc.	Stations	Snow	Ice in rivers, harbors, etc.
<i>California</i>	<i>Inches</i>	<i>Inches</i>	<i>New Hampshire</i>	<i>Inches</i>	<i>Inches</i>
Blue Canyon .....	14	.....	Pittsburg .....	23	.....
Huntington Lake ....	37	.....	<i>New Mexico</i>		
Norden .....	148	.....	Chama .....	12	.....
<i>Colorado</i>			Clouderoit .....	2	.....
Crested Butte .....	34	.....	Tres Piedras .....	T.	.....
Cumbres .....	45	.....	<i>New York</i>		
Dillon .....	20	.....	Alfred .....	4	.....
Leadville .....	3	.....	Beaver River .....	4	.....
Steamboat Springs ...	19	.....	Binghamton .....	T.	.....
<i>Idaho</i>			Buffalo .....	0	†
Hailey .....	9	.....	Jamestown .....	2	.....
Idaho City .....	14	.....	Old Forge .....	8	.....
Ketchum .....	20	.....	<i>Oregon</i>		
Kirkham .....	18	.....	Bull Run Lake .....	82	.....
McCall .....	37	.....	Fish Lake .....	42	.....
Shake Creek .....	32	.....	Government Camp ...	52	.....
Soldier Creek .....	27	.....	Harrison Mine .....	80	.....
Vienna Mine .....	108	.....	Imperial Mine .....	86	.....
<i>Maine</i>			Siskiyou .....	4	.....
Van Buren .....	4	.....	Sled Springs .....	29	.....
<i>Michigan</i>			<i>Pennsylvania</i>		
Escanaba .....	0	12.0	Freeland .....	1	.....
Grayling .....	T.	.....	Gettysburg .....	T.	.....
Ironwood .....	T.	.....	Gordon .....	2	.....
Mackinaw .....	T.	.....	State College .....	T.	.....
Marquette .....	0	†	Warren .....	1	.....
Newberry .....	T.	.....	<i>South Dakota</i>		
<i>Minnesota</i>			Rapid City .....	T.	.....
Duluth .....	0	†	<i>Washington</i>		
Ely .....	20	.....	Cascade Tunnel .....	94	.....
Leech Lake Dam .....	T.	.....	Paradise Inn .....	198	.....
<i>Montana</i>			<i>Wyoming</i>		
Belton .....	26	.....	Dixon .....	T.	.....
Haugan .....	12	.....	Dome Lake .....	38	.....
Loweth .....	2	.....	Evanston .....	4	.....
Missoula .....	1	.....	Foxpark .....	43	.....
<i>Nevada</i>			Newcastle .....	T.	.....
Arthur .....	4	.....	South Pass City .....	3	.....
Gold Creek .....	26	.....	Yellowstone Park ....	T.	.....
Hylton .....	1	.....			
North Fork .....	6	.....			

\* Shore ice. † Floating ice. ‡ Ice gorged. § Measurement impracticable.  
T. indicates trace.

north portion. Michigan, fields disappeared and Straits open. Huron, fields disappeared. Erie, fields extreme east portion broken up and moving out; navigation opened to Buffalo. Ontario, fields disappeared. Much less ice in all lakes.

This issue closes the season of the Snow and Ice Bulletin of 1926-27, and no further reports on ice conditions in the Great Lakes will be issued from Detroit.

P. O. DAY,  
Meteorologist, in charge of Division.

# Depth of Snow on Ground, 8 p. m., April 4, 1927

